6.0 IMPLEMENTATION

6.1 INTRODUCTION

This chapter provides the PWP/TREP Implementation Framework, which coordinates the timing of rail, highway, transit, community and resource-enhancement project components to ensure highway improvements do not outpace other multimodal transportation improvements for the corridor, and that proposed transportation improvements do not outpace natural-resources restoration and enhancement.

The Implementation Framework includes a Preliminary Phasing Plan (Section 6.2.1) for proposed PWP/TREP improvements to ensure transportation improvements would be implemented to achieve a multimodal solution for regional transportation needs, and to ensure transportation improvements are implemented in conjunction with comprehensive restoration and enhancement plans for the region's unique natural resources. In addition, the Implementation Framework includes a Resource Enhancement Program (Section 6.2.2) which utilizes a combination of traditional and non-traditional measures to mitigate coastal resource impacts of the proposed mobility improvements, particularly as it relates to enhancing marine and Environmentally Sensitive Habitat Area (ESHA) resources. The constrained, primarily developed North Coast Corridor (NCC) leaves few opportunities for large-scale land purchases for restoration opportunities that could enhance the corridor's natural resources, and the NCC's lagoon habitats are biologically unique and cannot be replicated elsewhere; thus, opportunities to enhance these habitats require comprehensive solutions with improvements focused on ecosystem-wide benefits. The PWP/TREP's innovative approach to mitigate impacts to natural resources in advance results in greater benefits to coastal resources on a corridor-wide level than if only ratio-based, project and site-specific mitigation were employed.

This chapter also describes the procedures the California Coastal Commission (Coastal Commission) will use to review and authorize development included in the PWP/TREP. As detailed in Chapter 1, the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail projects that improve the movement of freight and passengers fall under the exclusive jurisdiction of the Surface Transportation Board (STB) are not subject to Coastal Development Permit (CDP) or public works plan requirements. Furthermore, as project-level analysis for proposed rail improvements will not occur until project alternatives are chosen, and preliminary design, engineering, and resource impact analyses have been completed, project implementation and applicable Coastal Act development controls will be evaluated by the Lead Agency for project-specific rail proposals pursuant to future environmental and phased federal consistency review, as applicable. As such, the PWP/TREP is not the standard of review for the LOSSAN rail improvements that improve the movement of freight and passengers. However, the PWP/TREP Implementation Framework detailed in this chapter may provide non-binding guidance in evaluating rail corridor improvements included in the PWP/TREP as those specific projects may be subject to future phased federal consistency review as detailed in Section 6.4 (Federal Consistency Review Procedures). All other improvements included in the PWP/TREP must be found consistent with the PWP/TREP and all policies and implementation measures contained in Chapter 5, and are subject to the PWP and/or CDP procedures detailed in Sections 6.5 (PWP Development Review Procedures) and 6.6 (CDP Development Review Procedures).

Together with the policies, design/development strategies, and implementation measures in Chapter 5, the phasing requirements of Chapter 6 will ensure the PWP/TREP program of improvements is implemented consistent with applicable Coastal Act policies that address:

- Energy Conservation & Vehicle Miles Traveled
- Public Transit & Smart Growth

- Public Access & Recreation
- Marine Resources: Water Quality & Wetlands
- ESHAs & Special Status Species
- Archaeological & Paleontological Resources
- Visual Resources
- Site Stability & Management
- Agricultural Resources
- Conflict Resolution

6.2 IMPLEMENTATION FRAMEWORK

6.2.1 Phased Project Implementation

The PWP/TREP Preliminary Phasing Plan includes Initial-Term (2010–2020), Mid-Term (2021–2030), Long-Term (2031–2040), and Vision (2041–2050) project phasing groups for proposed rail, highway, community and resource enhancement projects (Table 6-1 and Figure 6-1A through Figure 6-1D). The Preliminary Phasing Plan is intended to maintain maximum flexibility within the overall PWP/TREP Implementation Framework while providing a clear understanding of the scope, correlation (location, affected resources, interdependence), and preliminary timeframe for implementing proposed rail, highway, community and resource enhancement projects.

The primary objectives of the Preliminary Phasing Plan are as follows:

- **Ensure Multimodal Project Phasing:** Identify project phasing and implementation priorities as guidance for rail improvements, and track the progress of rail corridor project implementation in the context of all other PWP/TREP improvements (highway, community and resource enhancement project implementation) which are subject to the PWP and Notice of Impending Development (NOID) procedures set forth in this chapter.

  The Preliminary Phasing Plan includes LOSSAN rail projects listed and grouped into Initial-, Mid-, and Long-Term projects and Unconstrained Vision projects according to the *San Diego – LOSSAN Corridor Project Prioritization Analysis* (July 2009). The Implementation Framework ensures the PWP/TREP transportation improvements are implemented consistent with the region's commitment to pursue a multimodal solution for regional transportation needs.
- **Provide Flexibility for Project Implementation:** Provide for maximum flexibility in implementing all PWP/TREP improvements to accommodate opportunities and uncertainties in potential future funding availability and local, state, and federal political and policy decisions, while ensuring projects are implemented in a way that balances rail and highway improvements, and that community and resource enhancements are implemented prior to, or concurrent with, project implementation.

  Provide for maximum flexibility in implementing resource enhancement projects pursuant to the Resource Enhancement Program (Section 6.2.2), while ensuring compliance with mitigation requirements for transportation projects and comprehensive enhancement of corridor resources.
- **Ensure Potential Resource Impacts & Benefits are Balanced:** Identify, quantify, and track, where feasible, coastal resource opportunities/benefits and impacts of each Initial-Term, Mid-Term, and Long-Term project phase. Integral coastal resource opportunities and benefits include:
  - Promotion of public transit and smart growth (energy conservation and air quality)
  - Improvements to public access and recreation
  - Protection/enhancement of water quality
  - Restoration, enhancement and/or preservation of wetlands
  - Restoration, enhancement and/or preservation of ESHAs.

TABLE 6-1: PRELIMINARY PHASING PLAN

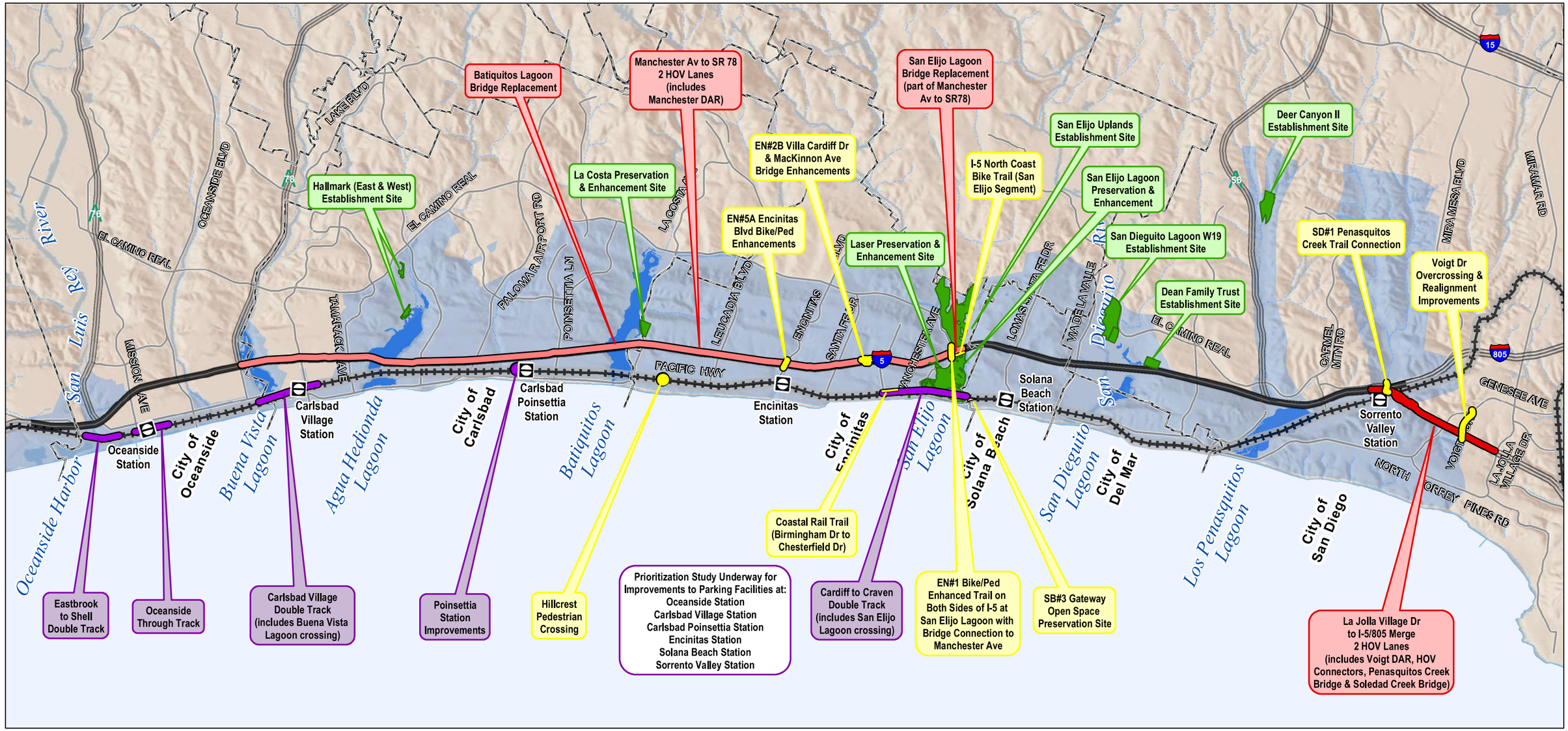
Phase	Project Phase Benefits	Highway	Bicycle & Pedestrian/ Community Enhancements	LOSSAN & Transit	Environmental
2010-2020	• 29.7 lane-miles of new HOV facilities • 2.6 miles of new rail double-tracking • 2.0 miles of new bike/ped facilities (1.3 miles of improved facilities) • 8 new bike/ped crossings (9 improved crossings) • 500+ acres environmentally improved • Capital investment: – $840M highway & environmental – $242M rail & transit	• 2 HOV lanes from Manchester Av to SR 78 – San Elijo Lagoon Bridge Replacement – Batiquitos Lagoon Bridge Replacement – Manchester DAR • 2 HOV lanes from La Jolla Village Dr to I-5/I-805 – Voigt DAR • I-5/I-805 HOV Connectors – Peñasquitos Creek Bridge – Soledad Creek Bridge	<u>Highway Adjacent</u> • EN#1 Bike/Ped Trail on Both Sides of I-5 at San Elijo • EN#5A Encinitas Blvd Bike/Ped Enhancements • EN#2B Villa Cardiff & MacKinnon Bridge Enhancements • I-5 North Coast Bike Trail *(San Elijo segment)* • SD#1 Peñasquitos Creek Trail Connection • Voigt Dr Overcrossing & Realignment Improvements <u>LOSSAN Adjacent</u> • Hillcrest Pedestrian Crossing • Coastal Rail Trail *(Birmingham to Chesterfield)*	• CP Eastbrook to CP Shell Double Track • Oceanside Through Track • Carlsbad Village Double Track – Buena Vista Bridge replacement • Encinitas Station Parking • CP Cardiff to CP Craven–San Elijo Lagoon Double Track – San Elijo Bridge replacement • Solana Beach Station Parking • Poinsettia Station Improvements	• Deer Canyon II (Pardee II) Site Establishment • Dean Family Trust Site Establishment • San Dieguito W19 Site Establishment • Laser Site Preservation & Enhancement • San Elijo Lagoon Preservation & Enhancement • San Elijo Upland Site Establishment • La Costa (Ayoub) Site Preservation & Enhancement • Hallmark (East & West) Site Establishment • Lagoon Mgmt/Endowment/Regional Dredging Program
2021-2030	• 32.6 lane-miles of new HOV facilities • 4.6 miles of new rail double-tracking • 20.7 miles of new bike/ped facilities (15.7 miles of improved facilities) • 18 new bike/ped crossings (33 improved crossings) • 13 acres environmentally improved • Capital investment: – $1,685M highway & environmental – $399M rail & transit	• 2 Express Lanes from I-5/I-805 to SR 56 – Carmel Creek Bridge Widening – I-5/SR 56 Interchange Improvements • 2 Express Lanes from SR 56 to Manchester Av – San Dieguito River Bridge widening • 2 Express Lanes from Manchester Av to Palomar Airport Road	<u>Highway Adjacent</u> • SD#2A Carmel Valley Bike/Ped Trail Connection • SD#2B Enhanced Park & Ride at Carmel Valley Rd • SD#2C Old Sorrento Valley Road Trail Connections • I-5 North Coast Bike Trail *(adjacent segments)* • SD#3 Bike/Ped Trail & Bridge on W Side of I-5 at San Dieguito • SD#4 Ped Overpass Connection N of Del Mar Heights Rd • SB#1 Streetscape Enhancements on Ida Ave • SB#2 Ped Trailhead at Solana Hills Dr • SB#3 Gateway Open Space Preservation Site • I-5 North Coast Bike Trail *(adjacent segments)* • Del Mar Heights Rd Overcrossing Improvements • Via de la Valle Undercrossing Improvements • Lomas Santa Fe Dr Undercrossing Improvements • Manchester Ave Undercrossing Improvements • EN#2A Park & Ride Enhancements at Birmingham Dr • EN#3 Hall Property Park Trail Connecting to Santa Fe Dr • EN#4 Trail Connecting Santa Fe Dr to Requeza St • EN#5B Trail Connecting Requeza St to Encinitas Blvd • EN#6A Union St Ped Overpass • EN#6B Cottonwood Ck Park to Union St Trail Connection • CB#1A Bike/Ped Trail & Bridge on W Side of Batiquitos • CB#1B Park & Ride Enhancement at La Costa Ave • CB#2 Trail on NE Side of I-5 at Batiquitos Lagoon • I-5 North Coast Bike Trail *(adjacent segments)* • Birmingham Dr Overcrossing Improvements • Santa Fe Dr Undercrossing Improvements • Requeza St Overcrossing Improvements • Encinitas Blvd Undercrossing Improvements • Leucadia Blvd Overcrossing Improvements • La Costa Ave Overcrossing Improvements • Poinsettia Ln Overcrossing Improvements • Palomar Airport Rd Overcrossing Improvements <u>LOSSAN Adjacent</u> • Crest to Coast Crossing • Coastal Rail Trail *(La Costa to Birmingham)* • Coastal Rail Trail *(Tamarack to Poinsettia Station)*	• Oceanside Parking • Carlsbad Village Station Parking • Carlsbad Poinsettia Station Parking • CP Ponto to CP Moonlight Double Track – Batiquitos Bridge replacement[1] • CP Moonlight to CP Swami Double Track • San Dieguito Bridge/Double Track – San Dieguito Bridge replacement • Del Mar Fairgrounds Platform • Del Mar Bluffs Additional Stabilization • Coast Highway Rapid Bus	• Buena Vista Lagoon Preservation & Enhancement

TABLE 6-1: PRELIMINARY PHASING PLAN (CONTINUED)

Phase	Project Phase Benefits	Highway	Bicycle & Pedestrian/ Community Enhancements	LOSSAN & Transit	Environmental
2031-2040	• 21.1 lane-miles of new HOV facilities • 5.6 miles of new bike/ped facilities (9.2 miles of improved facilities) • 22 improved bike/ped crossings • Capital investment: – $1,516M highway & environmental – $10M rail & transit	• 2 Express Lanes from Palomar Airport Rd to SR 78 – Buena Vista Lagoon Bridge Replacement – Agua Hedionda Lagoon Bridge Replacement – I-5/SR 78 Interchange Improvements	<u>Highway Adjacent</u> • CB#3 Bike/Ped Trail & Bridge on E Side of I-5 at Agua Hedionda • I-5 North Coast Bike Trail *(adjacent segments)* • Cannon Rd Undercrossing Improvements • Chinquapin Ave Undercrossing Improvements • Tamarack Ave Overcrossing Improvements • Chestnut Ave Undercrossing Improvements • Carlsbad Village Dr Undercrossing Improvements • Las Flores Dr Overcrossing Improvements • Jefferson St Overcrossing Improvements	• Mid-City to Palomar Airport Road BRT	• *Continuation of environmental improvements above*
		• 4 Express Lanes from SR 78 to Harbor Dr – San Luis Rey River Bridge Widening • Braided Ramps from Genesee to Sorrento Valley	• OC#1 Pocket Park & Ped Path at California St • OC#2 Oceanside Blvd Ped Streetscape Enhancement • OC#3 Division St Bike/Ped Enhancements • OC#4 Mission Ave Bike/Ped Enhancements • OC#5 Bush St Bike/Ped Enhancements & Community Gardens • OC#6 Community Open Space Park and/or Community Gardens • OC#7 SR76 Underpass: New Parking & Trailhead • OC#8 Ped Underpass Improvements N of San Luis Rey River • OC#9 Regional Gateway Feature at Harbor Dr • OC#10 Harbor Dr/Camp Pen Bike/Ped Enhancements • I-5 North Coast Bike Trail *(adjacent segments)* • Cassidy St Overcrossing Improvements • Brooks St Overcrossing Improvements • Neptune Way Overcrossing Improvements		
2041-2050	• 1.7 miles of new rail double-tracking • 3 rail-corridor grade separations • Capital investment: – $1,614M rail & transit			• Leucadia Blvd Grade Separation • Del Mar Tunnel: – Camino Del Mar Alternative – I-5 / Peñasquitos Alternative • Peñasquitos Double Track – Peñasquitos Bridge replacement (Dependent upon Del Mar Tunnel Alternative) • Two additional grade separations	• *Continuation of environmental improvements above*

[1] Funding has been advanced for the LOSSAN rail corridor bridge replacement over Batiquitos Lagoon, with the goal of constructing it in the 2010-2020 phase, concurrent with the I-5 highway bridge.

Naming convention used for consistency with maps and other chapters: SD=San Diego, SB=Solana Beach, EN=Encinitas, CB=Carlsbad, OC=Oceanside.



DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

FIGURE 6-1A

Project Improvements and Enhancements: Initial-Term Phase (2010-2020)

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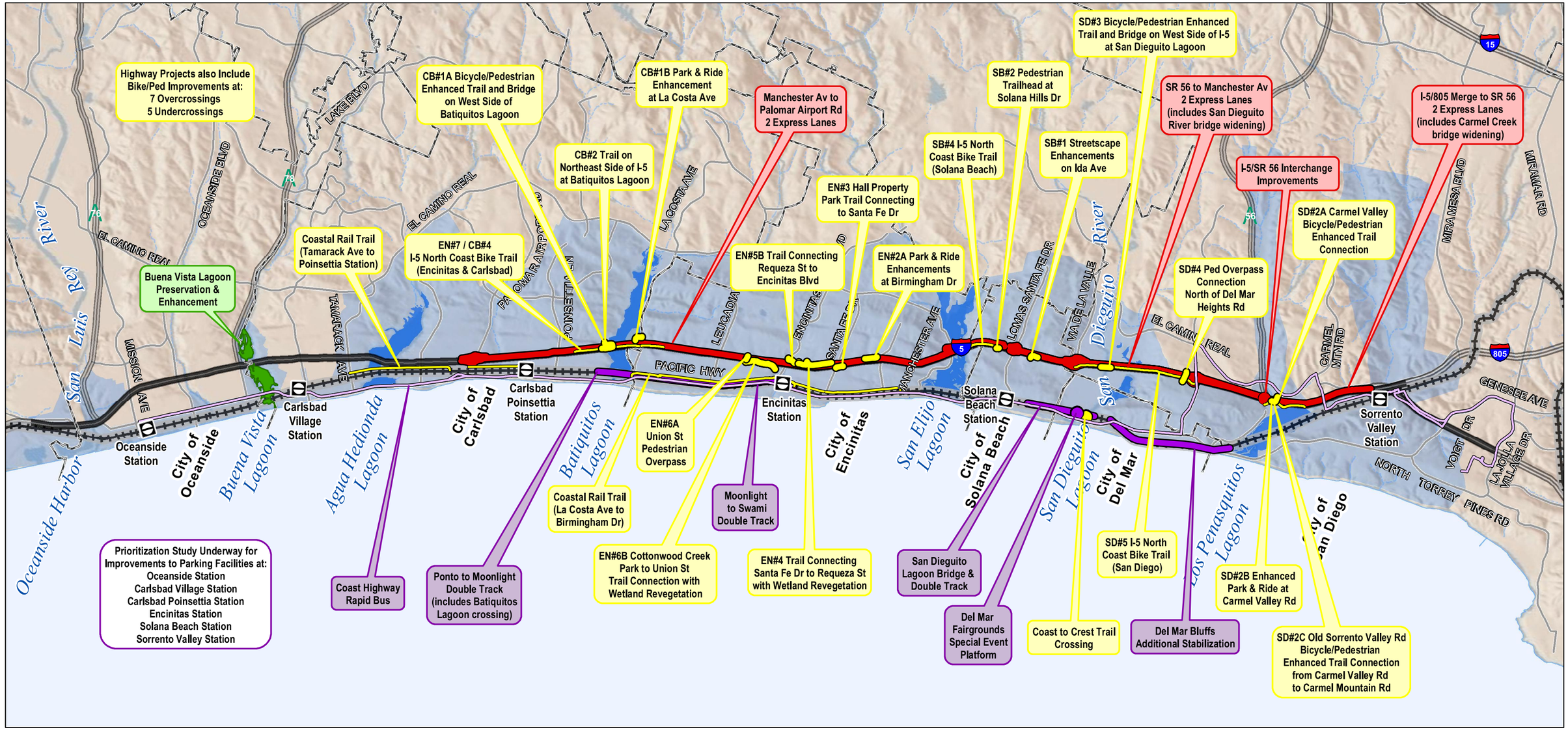

NORTH

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NOTE: The Resource Enhancement Program utilizes a pooled approach to creation, restoration, and preservation opportunites for wetland and ESHA resources throughout the corridor.

0 1 2 4 Miles

- Coastal Zone
- Lagoon
- City Boundary
- Interstate
- State Route
- Major Arterial
- I-5 NCC Project Area
- LOSSAN Project Area
- LOSSAN Station

Highway Projects
- Highway Improvement

Rail & Transit Projects
- Rail Improvement
- Coast Highway Rapid Bus

Bicycle & Pedestrian Projects
- Bicycle/Pedestrian Improvement
- I-5 North Coast Bike Trail or Coastal Rail Trail *(Segments Within I-5/LOSSAN ROW)*

Environmental Enhancements
- Environmental Enhancement

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

FIGURE 6-1B

Project Improvements and Enhancements: Mid-Term Phase (2021-2030)

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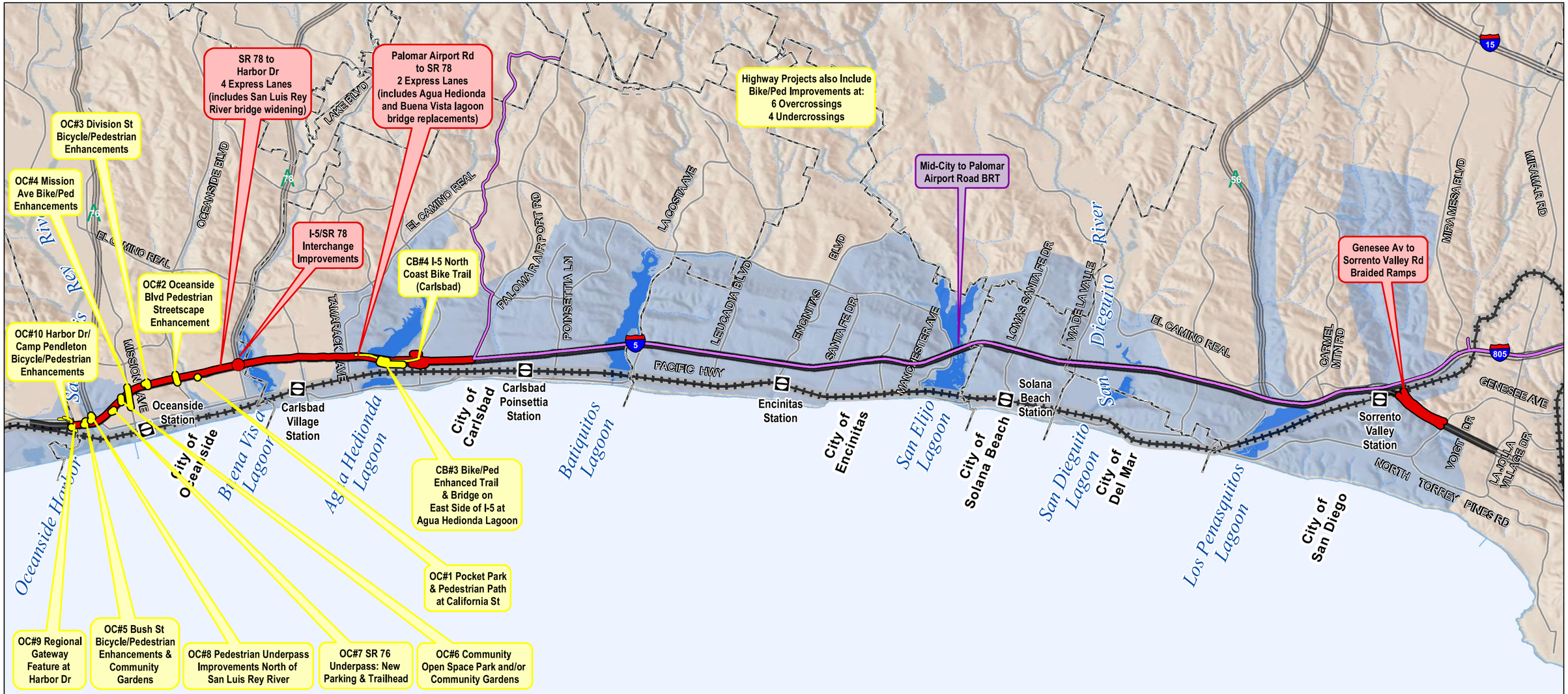

NORTH

DRAFT

NOTE: The Resource Enhancement Program utilizes a pooled approach to creation, restoration, and preservation opportunites for wetland and ESHA resources throughout the corridor.

0 1 2 4 Miles

- Coastal Zone
- Lagoon
- City Boundary
- Interstate
- State Route
- Major Arterial
- I-5 NCC Project Area
- LOSSAN Project Area
- LOSSAN Station

Highway Projects
- Highway Improvement

Rail & Transit Projects
- Rail Improvement
- Mid-City to Palomar Airport Road BRT

Bicycle & Pedestrian Projects
- Bicycle/Pedestrian Improvement
- I-5 North Coast Bike Trail *(Segments Within I-5 Right-of-Way)*

Environmental Enhancements
- Environmental Enhancement

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

FIGURE 6-1C

Project Improvements and Enhancements: Long-Term Phase (2031-2040)

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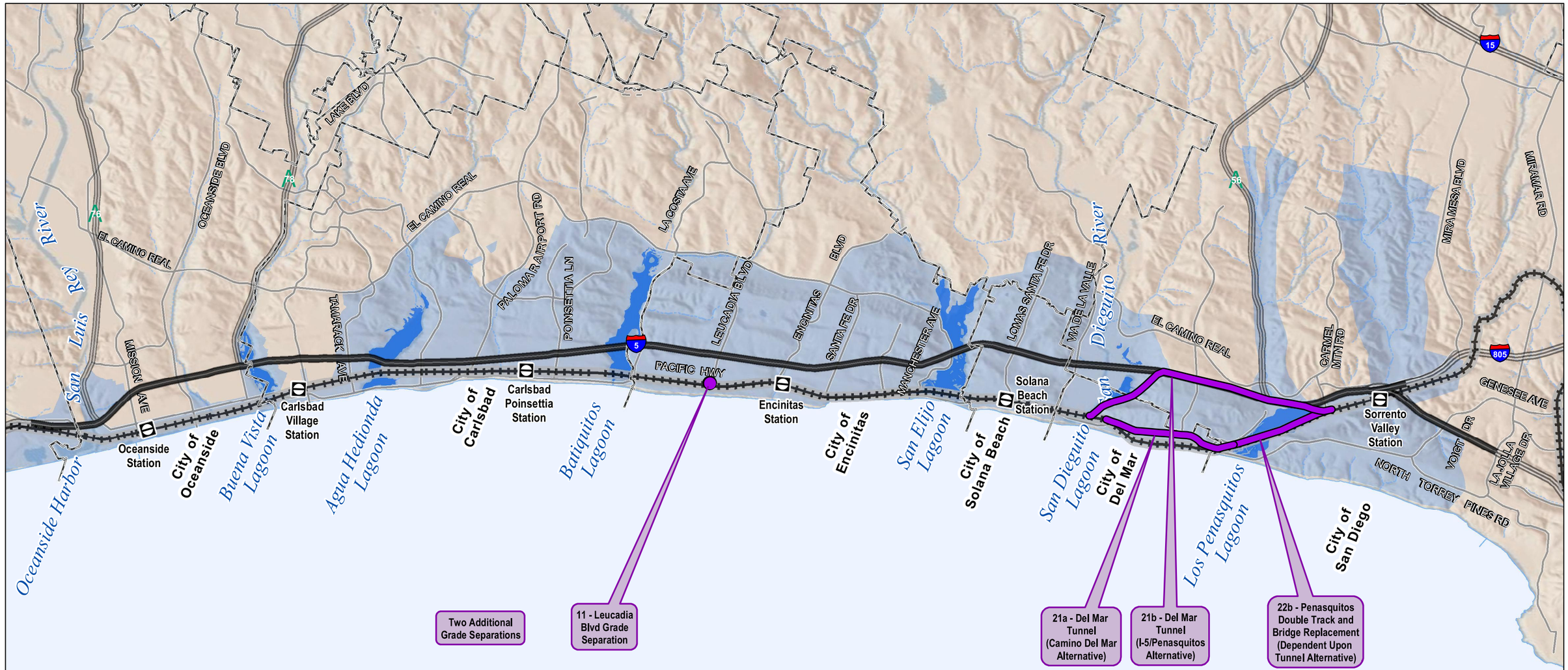

NORTH

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NOTE: The Resource Enhancement Program utilizes a pooled approach to creation, restoration, and preservation opportunites for wetland and ESHA resources throughout the corridor.

0 1 2 4 Miles

- Coastal Zone
- Lagoon
- City Boundary
- Interstate
- State Route
- Major Arterial
- I-5 NCC Project Area
- LOSSAN Project Area
- LOSSAN Station

Highway Projects
- Highway Improvement

Rail & Transit Projects
- Rail Improvement

Bicycle & Pedestrian Projects
- Bicycle/Pedestrian Improvement

Environmental Enhancements
- Environmental Enhancement

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

FIGURE 6-1D

Project Improvements and Enhancements: Vision Phase (2041-2050)

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6.2.1.1 Phasing Plan Factors

A range of priorities, constraints, and other factors shape the baseline phasing plan for the NCC consistent with the PWP/TREP phasing plan objectives. The primary phasing factors are the following:

- Available revenue and project cost (both capital and operations)
- Regional growth and transportation need
- Transportation system performance
- Minimization of construction impacts to the public and the environment
- Requirements of SB468
- Safety and rehabilitation needs
- Coastal access and promotion of alternative modes

Available Revenue and Project Costs

Fiscal constraints require projects to be accomplished gradually, as revenue becomes available. The stream of revenue from the regional *TransNet* sales tax, as well as the availability of state and federal funds, largely dictates how many projects the region can implement at any given time. Within these revenue constraints, individual project need, performance and benefits are evaluated to determine projects that will be the most effective for meeting plan objectives and that can be accomplished within the available funding at a given time. Capital funding for project construction is only one dimension of overall costs; many projects, especially transit, also require a commitment to provide operating funding in perpetuity. Operations cost, as well as maintenance costs, are therefore considered with capital cost within the phasing plan. In addition, many state and federal funds come with strict limitations on the types of activities for which they can be used. Most federal funds, for example, generally cannot be spent on operations and maintenance. Therefore, federal assistance available for a project's initial construction is also considered with available and reliable funding sources for operations and maintenance. The *TransNet* ordinance does provide some operational funding for transit, and these future revenue projections are factored into the transit service plans contained in the San Diego Association of Governments (SANDAG) 2050 Regional Transportation Plan (2050 RTP) and the PWP/TREP phasing plan. In addition, single-occupancy vehicles (SOV) using the I-5 Express Lanes will provide revenue (via user fees paid with FasTrak transponders) that can be used to support corridor transit operations.

Regional Growth and System Performance

The region's transportation needs and the performance of its transportation systems play heavily into the PWP/TREP phasing plan. As changes occur in the San Diego region and the North Coast Corridor—not just the continuation of growth, but also the evolution of local land use policy in conjunction with that growth—project phasing is designed to respond to these changes. Accordingly, the PWP/TREP phases projects in a manner that will both reduce congestion in the corridor and increase multimodal access to key corridor activity centers, including coastal resources. It is for this reason, for example, that a single high-occupancy vehicle (HOV)/Express Lane will be extended throughout the NCC before adding a second HOV/Express Lane in any location. This allows the program to respond to current congestion and access needs in a measured way, while leaving more significant expansions for later phases, when demand is projected to be even higher. By aligning project delivery with growth, the phasing plan will allow the NCC to provide the best possible system performance to meet traveler demands.

Construction Impacts and SB 468

The phasing plan also seeks to minimize the impacts of construction, both to the public as well as to the environment. Community enhancement projects, for example, are aligned with the highway and rail projects that correspond to their locations, which will allow for concurrent construction and provide assurances that any existing facilities impacted by construction are immediately replaced and improved. This will create a synergy among projects that will reduce disruptions and minimize detrimental impacts to the lowest possible levels. In addition, SB468 requires the NCC PWP/TREP phasing plan to phase lagoon bridge construction in a way that that minimizes construction impacts to the critical lagoon resources.

Safety and Rehabilitation

Safety and rehabilitation needs also influence the phasing plan. Early phase projects include replacement of several deteriorating LOSSAN bridges, improvements at several rail crossings to enhance safety for motorists, bicyclists and pedestrians, and operational safety improvements on I-5. These projects are given priority in the phasing plan to ensure the safety of all users of the transportation system. In addition, these safety enhancements are designed to be compatible with the ultimate plan for the corridor, thus minimizing the use of "throwaway" enhancements that would be superseded by future projects.

Coastal Access and Promotion of Alternative Modes

Improving access to, through and within the corridor is the overarching goal for the multimodal transportation program and phasing plan. The phasing plan is designed to increase coastal access, reduce congestion, and promote the use of transit and other non-automobile travel modes as efficiently and effectively as possible within the confines of companion factors such as funding availability, travel demand, growth, and transportation system performance. By placing the majority of rail projects in the first phase and promoting increased HOV travel on I-5, the phasing plan prioritizes projects that meet the overarching goals of improved multimodal transportation and coastal access. Prioritizing the completion of one HOV/Express Lane throughout the corridor before initiating construction of additional HOV/Express Lanes serves to encourage HOV travel as much as possible by completing the HOV network and responding incrementally to travel demand over time. Once demand swells enough to create congestion in the first HOV Lane, the incentive for HOV travel will diminish; it is at this point that the second Express Lanes will be constructed, which will reduce HOV congestion and therefore restore the HOV incentive.

6.2.1.2 Process for Phased Implementation

This section identifies SANDAG/Caltrans phasing obligations for individual project components included in the PWP/TREP. The phasing plan combines rail, highway, transit, community and resource enhancement projects into project phases. The combination of projects in each phase has been designed to ensure that development of multimodal transportation options keeps pace with highway improvements. The specific phasing requirements are as follows:

1. **Ensure Multimodal Project Phasing:** SANDAG and Caltrans must complete all project phases for highway and associated community enhancement projects in order—i.e., they must start with Initial-Term projects, move to Mid-Term projects and then on to Long-Term projects, except where highway and associated community enhancement project "shifts" between phases are allowed per the following section.

Individual rail, highway, community and resource enhancement projects within an active project phase must be "complete" before SANDAG and Caltrans begin constructing highway projects in the next project phase.

A project phase will be considered "complete" with a NOID submittal demonstrating that construction of all rail, highway, and community enhancement projects included in the phase has been initiated and any corresponding mitigation/enhancement requirements implemented pursuant to the Resource Enhancement Program (Section 6.2.2).

2. **Provide Flexibility for Project Implementation:** SANDAG and Caltrans retain sole discretion to determine what order to construct projects within a given phase. Some projects within an active project phase may be completed before others in the same phase start. Other projects in the same phase may be carried out in parallel.

   SANDAG and Caltrans may "shift" individual highway and associated community enhancement projects from one phase to another by demonstrating in the corresponding NOID submittal that the total mobility and coastal resource benefits (coastal access, resource restoration/enhancement, etc.) of the phase the project is entering exceed the cumulative impacts of that phase. Cumulative phase benefits and impacts will continue to be documented and updated within the phasing plan per the process outlined in the following section.

3. **Ensure Potential Resource Impacts & Benefits are Balanced:** SANDAG and Caltrans must keep track of the status, project phase benefits and/or impacts covered by this PWP/TREP and that are part of the Resource Enhancement Program.

   The Preliminary Phasing Plan identifies and quantifies, where feasible, the mobility and coastal resource opportunities/benefits and impacts of each project phase. Pursuant to Section 6.5 (PWP Development Review Procedures), NOID submittals for individual projects within an active phase must include a discussion of the status of implementation of rail, highway, community and resource enhancement projects included in the same project phase. Cumulative phase benefits and impacts will continue to be documented and updated per NOID submittals, which will provide a reporting mechanism for progress made toward achieving PWP/TREP implementation objectives and current data regarding project phase benefits and impacts from which to determine:

   - That a project phase is "complete" for purposes of initiating the next project phase for highway and associated community enhancement projects
   - A proposed development's contribution to the cumulative mobility benefits of the project phase (public transit, bicycle, pedestrian, coastal access/recreation improvements)
   - A proposed development's contribution to cumulative project phase resource impacts, project phase mitigation requirements, and status of compliance with mitigation/enhancement requirements (as established and accounted for per the Resource Enhancement Program, Section 6.2.2)
   - A proposed development's contribution to cumulative project phase resource benefits (water quality, wetlands, ESHAs), overall progress of restoration and enhancement improvements in the corridor and success of achieving the goals of the Resource Enhancement Program (Section 6.2.2), which may have project components and/or procedures not subject to PWP/NOID procedures (i.e. large-scale restoration and monitoring plans for San Elijo and Buena Vista Lagoons).
   - The appropriateness of potential project shifts between phases

6.2.1.3 Performance Reporting

The PWP/TREP includes ongoing monitoring to track progress toward meeting the goals outlined in the PWP/TREP and phasing plan. The indicators used in this ongoing monitoring will illustrate those areas in which the region appears to be moving in the right direction and those in which improvement is needed. These indicators provide the stakeholders with assurances that the program is being implemented in a timely and balanced manner. These indicators can also serve to assess if requested project-specific scope and/or schedule changes to future improvements in the program are consistent with commitments made in the PWP/TREP.

Reporting on the performance of PWP/TREP implementation recognizes that the success of the improvements goes beyond the initial capital investment. Performance reporting also assesses how the capital investment made in the corridor has resulted in tangible improvements to PWP/TREP objectives.

While capital improvements will be quantified and tracked, how those improvements ultimately result in changes to human behavior is harder to accurately forecast—especially given the impact of various external variables that SANDAG and Caltrans do not control. Consequently, the performance reporting and change process provides flexibility to react to factors outside of SANDAG and Caltrans control, while providing assurances that the coastal objectives commitments of the PWP/TREP are met over the length of the program.

The ultimate success of the NCC in meeting project objectives is not only a function of capital investment but also many external factors such as public acceptance, fuel prices and economic conditions that Caltrans and SANDAG do not control. Historically, many of these external factors are also very volatile over short time frames. For example, while the general economic health of California has been a very positive upward trend over the last 100 years, in any given year (or series of years) there are significant peaks and valleys. Consequently, despite a strong commitment to the NCC program by SANDAG and Caltrans, this commitment may not directly correspond to meeting specific transportation objectives in any given year. As an example, while the region can commit to adding additional track and trains, they cannot commit to the number of people riding those trains in any given future year.

It is also important to point out in addition to the capital investments addressed in the PWP/TREP, there are a number of other implementation strategies the region is pursuing to maximize the effectiveness of the capital investments within the corridor. These strategies demonstrate that the region's objectives are very much in alignment with the PWP/TREP goals of reducing the growth of vehicle miles traveled. However, the effectiveness of these strategies is very hard to accurately forecast. The strategies include:

- Analyzing the feasibility of a new commuter rail station in Camp Pendleton
- Developing corridor specific Transportation Demand Management (TDM) Strategies to facilitate continued travel behavior change once construction is complete influencing a sustained modal shift from SOVs
- Collaborating with the other Southern California regions to identify rail operational strategies (such as express trains and common ticketing) to reduce interregional rail travel times and improve rail competiveness.

Goals of Performance Reporting: Given the above issues, NCC performance monitoring will:

- Provide assurances that the program sponsors are implementing the program in good faith, with due diligence and in a timely and balanced manner
- Recognize that long-term success in meeting program objectives requires a commitment that goes beyond the initial capital investment
- Provide flexibility to maintain balanced project delivery, despite inaccurate forecasts and/or external factors
- Recognize that program success cannot be defined by any one measure, but rather program performance should be analyzed as a group of measures over a multiyear period to demonstrate specific trends and needed areas of improvement
- Allow for flexibility to address the likely scenario that some outcomes may be underperforming at a given point in the program while others could be performing better than expected. Under this scenario the program should still be allowed to move forward as long as the measure of aggregate outcomes falls within an acceptable range
- Measure and report difficult to predict demand and usage information not as a threshold but as valuable information necessary to inform future decisions.

Transportation Report Package

The Transportation Report Package will be prepared to coincide with the monitoring reports SANDAG prepares for regularly updated regional transportation and growth plans and will be submitted every 4 to 5 years in order to provide detail on improvements to the entire transportation system located within the NCC, as described in the PWP/TREP.

The package will include updates on capital improvements, an accounting of dollars invested, changes in transportation trends and information on other transportation strategies implemented through the corridor. In particular, the report will provide an overall picture of the progress made during the reporting period toward meeting the 30-year transportation goals expressed by the region within regional plans and the PWP/TREP. The report will consider a variety of factors to track overall enhancements to the transportation system within the corridor, particularly those necessary to ensure that positive steps toward improved connectivity and mass transit are developed to reduce vehicle miles traveled and energy usage as described in the PWP/TREP. The report will include both a description of areas where measureable enhancements have been realized as well as areas where the results do not meet expectations, an analysis of the factors behind those results and potential adaptive management solutions for improvements, where necessary. Moreover, the report will provide a reassessment of land-use changes over time and identify new opportunities for improved transit services as a result of those changes. Specific factors to be reported are shown in Table 6-2 and will reflect performance in the following categories:

- Coastal Access and Connectivity Improvements
- Moving People, Not Vehicles (Mode Share)
- Level of Investment
- Improving Efficiency and Managing Demand
- Facility Performance
- General Trends (Qualitative)

TABLE 6-2: NORTH COAST CORRIDOR TRANSPORTATION AND ENVIRONMENTAL PERFORMANCE MEASURES

Performance Measure	Definition
Coastal Access and Connectivity Improvements	
Number of Added Park-and-Ride Parking Spaces	The quantity of parking stalls added to park-and-ride facilities on I-5 (not at rail stations) in the NCC.
Number of Added Transit Station Parking Spaces	The quantity of parking stalls added to transit stations in the NCC.
Implementation of Complete Streets Multi-Modal Improvements on Coast Highway	Integration of Complete Streets concepts and designs, including enhanced pedestrian, bicycle and/or transit facilities.
Number of Peak Period and Daily Local Bus and Shuttle Trips to LOSSAN Corridor Stations	Number of scheduled peak-period and daily local bus and shuttle trips serving LOSSAN stations in the NCC.
Weekday Local Bus Passenger Ons/Offs at LOSSAN Stations	Number of weekday local bus boarding and alighting passengers at LOSSAN stations.
Miles of New/Improved Bicycle/Pedestrian Facilities	The length, measured in miles, of new, improved or upgraded bicycle paths/lanes and pedestrian paths/trails/sidewalks constructed in the NCC during the phase in question, including crossings of I-5 and LOSAN corridors.
Number of New/Improved Bicycle/Pedestrian Crossings of I-5/LOSSAN Corridors	The quantity of new or enhanced bicycle or pedestrian facilities constructed in the NCC that allow for the safe crossing of the I-5 corridor, the LOSSAN corridor, and lagoons.
Moving People, Not Vehicles (Mode Share)	
Number of Weekday/Weekend COASTER (Train) Trips	Number of scheduled peak-period, weekday and weekend COASTER trips in the NCC.
Number of Weekday/Weekend LOSSAN Passenger Train Trips (COASTER/Amtrak/Other)	Number of scheduled peak-period, weekday and weekend passenger train trips on COASTER/Amtrak/other in the LOSSAN corridor in the NCC.
Weekday/Annual COASTER Ridership	Number of boarding passengers on the COASTER commuter rail on a weekday/annual basis.
Weekday/Annual Total Passenger Train Ridership (COASTER/Amtrak/Other)	Number of total boarding passengers on the LOSSAN rail corridor (COASTER/Amtrak/Other) on a weekday/annual basis.
COASTER Seat Capacity Occupied	Percent of total seat capacity occupied on COASTER on a weekday or annual basis.
Daily Number of Commuter Bus (BRT) Trips	Daily number of scheduled BRT trips serving the NCC.
Number of Vanpools in NCC	Number of vanpools and carpools originating or ending in the NCC according to SANDAG's iCommute Vanpool/Carpool Program.
Daily Carpool and FastTrak Users on the I-5 HOV/Express Lanes	Number of annual passenger trips in carpools on the HOV/Express Lanes in the NCC (number of carpool vehicles multiplied by estimated occupancy).
Peak Period Mode Share (SOV, HOV, Transit) at Key Locations	Progress update on the region's goal of improving peak-period non-SOV mode share in the NCC from 2-3% to 10-15%.

TABLE 6-2: NORTH COAST CORRIDOR TRANSPORTATION AND ENVIRONMENTAL PERFORMANCE MEASURES (CONTINUED)

Performance Measure	Definition
Level of Investment	
Miles of HOV/Express Lanes Added	The length, measured in lane-miles, of new HOV or Express Lane facilities constructed on I-5 in the NCC.
Miles of New LOSSAN Double Track	The length, measured in track-miles, of new track constructed on the LOSSAN corridor in the NCC that eliminates single-tracked sections or provides enhanced operational capacity.
Capital Transportation Investment: Transit	The amount of capital dollars invested in transit projects.
Capital Transportation Investment: HOV/Express Lanes	The amount of capital dollars invested in highway projects.
Programming and Expenditures of FastTrak Revenue	Accounting of I-5 Express Lanes revenue collected and expended.
Improving Efficiency and Managing Demand	
Transportation Demand Management Programs/Activities	Implementation of TDM programs and activities that support NCC mobility, access and education.
Transportation System Management Operations/Infrastructure	Implementation of TSM operational and infrastructure improvements that support NCC mobility and access.
Improvements Made Outside NCC that Improve Conditions within NCC	Infrastructure and operational investments and improvements wthat support the NCC mobility and access.
Coordinated Project Construction to Avoid/Minimize Impacts	Description of coordinated project construction activities that avoid/minimize impacts.
Facility Performance	
I-5 Travel Time (General Purpose and HOV/Express) (Peak/Off Peak)	Median corridor travel times on I-5.
I-5 General Purpose Lanes Reliability (Buffer Time)	Given historical congestion patterns, the time required for a traveler to guarantee 95% on-time arrival on a trip through the corridor.
Annual Hours of Traffic Delay (VHD) on I-5	The total hours of delay experienced by NCC drivers due to congestion, in the corridor.
COASTER Travel Time	Scheduled trip travel time for COASTER between Oceanside and Downtown San Diego.
COASTER/Amtrak On-Time Performance	Percent of COASTER and Amtrak trips on-time as reported by NCTD and Amtrak, respectively.
Vehicle Miles Traveled (VMT) on I-5	The total number of miles traveled in the corridor by all vehicles.
Number of Trucks on I-5/Percent of I-5 Traffic Comprised of Trucks	Number and/or percent of truck trips on I-5 in the NCC.
Number of Daily/Weekly/Annual Freight Trains	Number of daily, weekly, or annual freight trains operating in the NCC.
General Trends (Qualitative)	
NCC Population Growth (Number and Percent)	Number of people living in the NCC and percent change from previous report.
NCC Housing Growth (Number and Percent)	Number of housing units in the NCC and percent change from previous report.
NCC Employment Growth (Number and Percent)	Number of jobs in the NCC and percent change from previous report.
Regional Transportation and Funding Constraints and Opportunities	Description of regional transportation and funding strategies and policies that affect NCC.

If a comprehensive review of the above parameters does not display substantial gains in the access, connectivity, numbers of people moved via non-SOV travel modes, investment, efficiency, and performance, then independent analysis and adaptive management would be instituted to identify potential solutions that could further improve mobility and alternate transit opportunities that have not previously been identified or implemented through the PWP/TREP.

6.2.2 Resource Enhancement Program

The North Coast Corridor includes approximately 30 miles of coastline that is recognized for a number of unique and significant marine and environmentally sensitive resource areas (ESHA). The coastal watersheds, lagoons, and upland areas in the corridor provide a range of diverse habitats and ecosystems that support a variety of plant and wildlife species. Due to the location of the proposed NCC improvements, the sensitive habitats traversed by the planned corridor improvements and the sensitive species living along the corridors, all impacts to coastal resources cannot be avoided. The NCC Resource Enhancement Program (REP) has been developed to identify compensatory mitigation measures to address these unavoidable impacts, and to implement resource enhancement opportunities that exceed the benefits of standard compensatory mitigation programs. Compensatory mitigation is defined by the U.S. Army Corps of Engineers as the "restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved" (2012).

The proposed REP employs a combination of measures to mitigate for coastal resource impacts resulting from implementation of the NCC transportation improvements and community enhancement projects. The combined mitigation program approach recognizes the constrained, primarily built-out condition of the NCC, which leaves few opportunities for land acquisition typically necessary to implement traditional, ratio-based habitat mitigation efforts. Even fewer opportunities exist in the NCC for large-scale land acquisitions that could allow traditional ratio-based mitigation efforts to be focused in distinct areas with the goal of establishing large tracts of contiguous and diverse habitat areas within the corridor. However, the NCC is home to six major lagoon systems, which represent some of southern California's most significant natural resource areas. These lagoon systems and upper watersheds provide large, contiguous habitat areas that support sensitive habitat for a variety of plant and wildlife species, and that provide water quality, flood control, groundwater recharge and recreation benefits. The NCC's lagoon systems and their habitats are biologically unique and cannot be replicated elsewhere. As such, opportunities to protect the NCC's lagoon systems from potential future degradation and to enhance and expand habitat within these systems requires comprehensive solutions with mitigation efforts focused less on ratio-based mitigation and more on ecosystem-wide enhancements. Given the unique ecological value of the NCC's lagoons, opportunities to improve the ecological function of the systems exceeds the benefits of pursuing only ratio-based mitigation efforts on the relatively small, fragmented and isolated land areas remaining in the NCC for such mitigation efforts.

The REP includes options for allocating funding from SANDAG's Environmental Mitigation Program for a variety of regionally significant mitigation (establishment), restoration and preservation/enhancement opportunities, including for 1) habitat mitigation parcels purchased for the NCC program in consideration of the sites' contribution to protecting and enhancing NCC lagoon system and watershed function and values and meeting no net loss through establishment and restoration, 2) acquisition of preservation/enhancement parcels which contribute to regionally significant resources, and 3) for regionally significant lagoon restoration opportunities, endowments for long-term resource maintenance

needs, and formation of a Scientific Advisory Committee. Design of transportation facility infrastructure improvements which inherently enhance lagoon system function and values are also included in the REP; however, funding for these enhancements would be provided through capital funds. The REP approach to advancing habitat establishment, restoration and preservation/enhancement mitigation projects ahead of NCC project impacts, and designing transportation facility infrastructure improvements to avoid and minimize project impacts, thereby inherently enhancing lagoon system function and values, where feasible, results in greater benefits to coastal resources on a corridor-wide level than if only ratio-based, project and site-specific mitigation were employed.

6.2.2.1 Resource Enhancement Program Overview

The REP provides for mitigation planning and implementation through the NCC PWP/TREP process to effectively mitigate NCC project impacts in a manner that addresses regionally significant resource enhancement and preservation needs. REP measures include strategically acquiring establishment and restoration opportunities, preserving existing ESHAs, and enhancing lagoon system function and values through optimized design of transportation facility infrastructure improvements and facilitating large-scale restoration plans, all within the NCC Coastal Zone area (see Figure 6-2). The REP also establishes an endowment to increase the capacity for long-term stewardship of NCC resources for the foreseeable future, as well as funding of a Scientific Advisory Committee to evaluate, prioritize, and oversee the implementation of the mitigation program. As detailed in the following sections, the REP provides the planning and Implementation Framework to ensure the most valuable, high quality mitigation opportunities in the NCC are identified, secured, and prioritized for implementation in a manner that cost-effectively utilizes available mitigation funding to maximize benefits to the corridor's natural resources.

New and improved transitional habitat and buffer areas, restored riparian corridors, preservation and/or restoration of habitat areas via the purchase of land areas adjacent to corridor lagoons, and comprehensive lagoon restoration through optimized design of transportation facility infrastructure improvements and funding of major restoration efforts will address water quality improvements and habitat needs of special-status and wildlife species, and will achieve the overall goal of enhancing biodiversity and habitat value throughout the corridor.

6.2.2.2 Resource Enhancement Program Funding

The *TransNet* Extension Ordinance approved by the San Diego voters in November 2004 established an Environmental Mitigation Program (EMP) for the advancement of mitigation for resource impacts associated with regional and local transportation projects. The REP is structured to support the region's efforts to develop a comprehensive regional mitigation strategy utilizing the *TransNet* EMP, to be implemented as an integrated element of the PWP/TREP Implementation Plan. The REP prioritizes expenditure of EMP funds on a corridor-wide level, with an emphasis on advanced habitat establishment, restoration, preservation/enhancement, and improving the ecological health of sensitive NCC habitats through funding of system-wide restoration plans, endowments, and a Scientific Advisory Committee. Optimized transportation facility infrastructure specifically designed to enhance lagoon system function and values are also proposed as part of this program to ensure avoidance and minimization of project impacts, but would be funded through capital expenditures.

6.2.2.3 Resource Enhancement Program Working Group

The PWP/TREP includes formation of a REP Working Group intended to serve as an oversight committee that would include resource agency personnel. The REP Working Group will provide

oversight and advisory assistance for purposes of coordinating and implementing the specific REP requirements in the NCC. The REP Working Group would include staff representatives of federal and state agencies that are directly involved in permitting of transportation projects and implementation, including U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish and Game, California Wildlife Conservation Board, Regional Water Quality Control Board and the Coastal Commission.

The REP Working Group will serve to provide REP project implementation and monitoring oversight, and advise SANDAG and Caltrans on potential resource benefits of new mitigation or enhancement opportunities that may be determined necessary as contingency mitigation, and/or those warranting consideration for incorporation into the REP given their unique value. The REP Working Group would also prioritize and coordinate disbursement of REP funds for the San Elijo and Buena Vista Lagoon Restoration Projects.

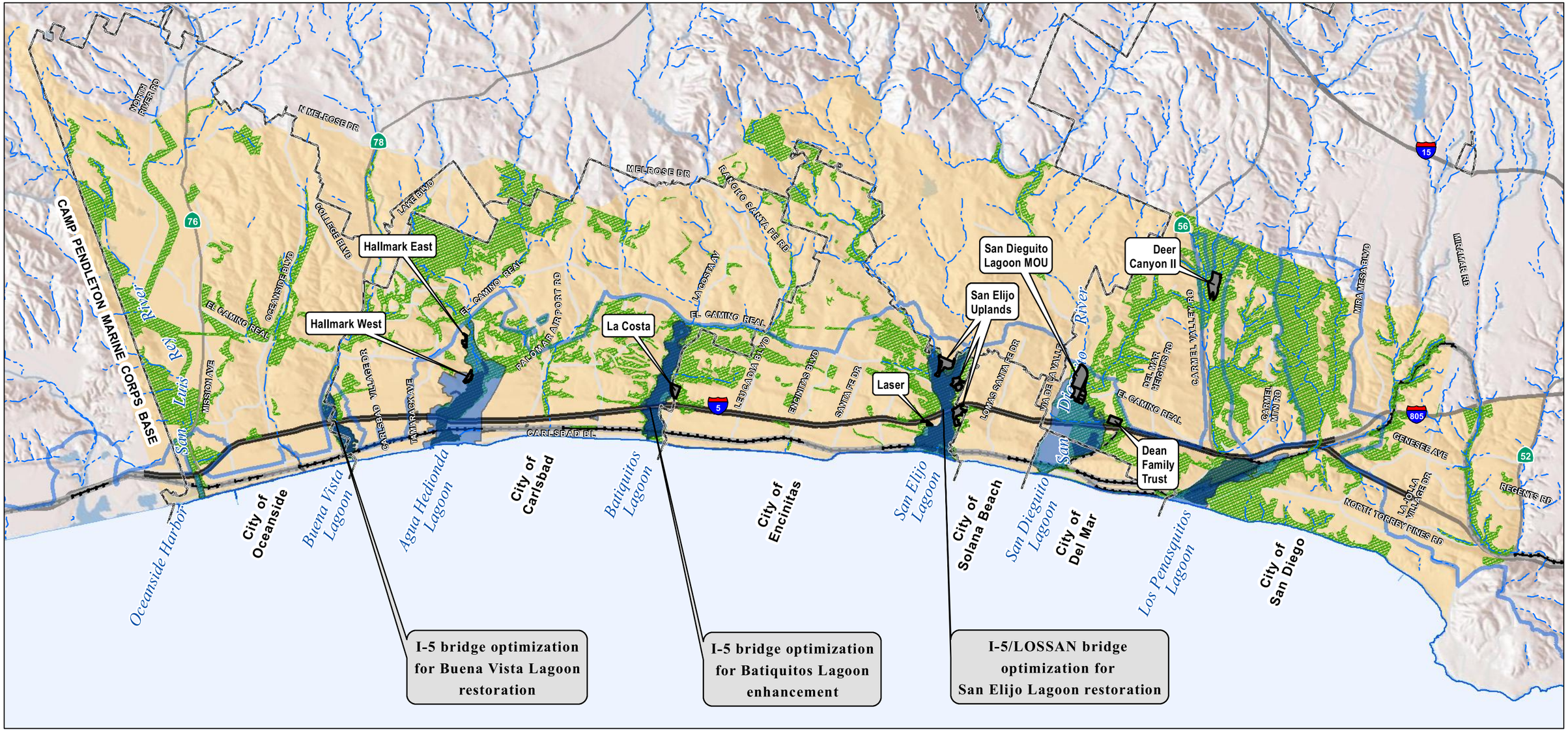
In addition to the REP Working Group, another opportunity exists to establish an endowment through SANDAG's EMP to fund an independent Scientific Advisory Committee for the REP, in which funds would be provided to cover expenses of researchers charged with conducting research, study and evaluation of the REP effectiveness and success.

6.2.2.4 Resource Enhancement Program Goals and Process Overview

Goals

The primary goal of the REP is to identify the package of natural resource establishment, restoration, and preservation/enhancement opportunities to mitigate potential resource impacts caused by implementation of the NCC mobility and community enhancement projects, and to promote a large-scale, systems-approach to resource enhancement to maximize the benefit to the region. Funding for resource enhancements is directed to those enhancements identified as addressing the most critical ecological needs in the NCC while respecting the phasing of project development and mitigation needs identified in the PWP/TREP and the voter-adopted *TransNet* Expenditure Plan's EMP budget for the NCC. The resource enhancement opportunities package is intended to be flexible enough to adapt to future changes in opportunities, while promoting early enhancement of natural resources.

Early establishment and restoration of habitat areas will serve to reduce typically required mitigation ratios for project impacts by eliminating impacts associated with temporal loss of wetland and sensitive upland habitat functions and values. In addition, early acquisition of sites containing high-value habitat for long-term preservation, and early phasing of transportation facility infrastructure that is specifically designed to avoid and minimize impacts, enhance lagoon system function and values, and facilitate large-scale lagoon restoration will further serve to mitigate projects impacts associated with both temporal loss of habitat values and temporary construction-related impacts. REP implementation will increase the extent, value and success of natural resource protection, restoration and enhancement in the NCC. The PWP/TREP REP achieves this goal through developing and implementing a regional plan for the advanced acquisition, establishment, restoration, and preservation/enhancement of the NCC's natural resources, infrastructure improvements designed to avoid and minimize impacts and enhance resources, and long-term resource management endowments.



NORTH

0 1 2 4 Miles

- I-5 NCC Project Area
- LOSSAN Proposed Track
- LOSSAN Existing Track
- North Coast Corridor Travel Shed
- City Boundary
- Interstate
- State Route
- Major Arterial
- Coastal Zone Boundary

Coastal Zone Appeal and Permit Areas

- Coastal Commission Permit Jurisdiction
- Lagoon

- Mitigation Sites
- Land Preservation Area

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

FIGURE 6-2

Draft Resource Enhancement Program Overview

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Process Overview

REP mitigation opportunities and asset evaluations were identified and developed in coordination with various NCC natural resource stakeholders and resource agencies. In consultation with stakeholders and resource agency representatives, SANDAG and Caltrans have identified two primary mitigation opportunity categories of the REP (described in the following section), as well as a variety of preservation/enhancement and endowment options to address regionally significant resource needs. Comments from stakeholders and resource agency representatives further helped identify the individual mitigation and preservation/enhancement opportunities proposed to satisfy each category of the REP.

Regionally important restoration opportunities in the corridor have been discussed with stakeholders and the resource agencies and, in some cases, the opportunity to implement site-specific restoration efforts has already been secured via land acquisition of suitable restoration sites. In 2008, SANDAG and Caltrans sent letters to federal and state resource agencies requesting concurrence on three (3) specific property acquisitions for purposes of further considering the sites as mitigation for NCC mobility project impacts. Letters acknowledging acquisition and further consideration of three sites for NCC project mitigation (Hallmark, Dean and La Costa) were received in 2008 and 2009 from the California Department of Fish and Game, Regional Water Quality Control Board, and Coastal Commission, and the sites accordingly purchased and incorporated into the REP. The National Marine Fisheries Service and U.S. Fish and Wildlife Service also submitted a letter acknowledging significant conservation value in considering the Hallmark parcels as mitigation, but requested additional information regarding the comprehensive mitigation strategy before moving forward. A fourth property (the Laser mitigation site) was also purchased for the REP. Written concurrence from the resource agencies acknowledging acquisition and further consideration of the Laser site for NCC project mitigation was received from the U.S. Fish and Wildlife Service and the California Department of Fish and Game; additionally, other participating resource agencies were informed of the purchase during National Environmental Policy Act (NEPA) 404 coordination meetings held in 2011 and 2012. Additional opportunities have since been identified that resulted in expansion of the already approved Deer Canyon mitigation site with the addition of the Deer Canyon II uplands mitigation site, and a new opportunity has been proposed at the San Elijo Lagoon uplands.

In addition, large-scale restoration plans for San Elijo Lagoon and Buena Vista Lagoon are currently being considered or actively pursued by various stakeholder groups and the resource agencies. SANDAG and Caltrans have been working with the cities, resource agencies, and stakeholders to help move these restoration projects forward by assisting in planning and funding required technical and environmental studies. Furthermore, SANDAG/Caltrans funded numerous studies to analyze optimized I-5 bridge designs at the corridor lagoons intended to minimize tidal muting east of I-5. These enhanced bridge designs will result in possible establishment and/or preservation/enhancement of wetland habitat and water quality benefits within the lagoons.

6.2.2.5 North Coast Corridor Resource Impacts and Mitigation Opportunities

Table 6-3 includes a summary of permanent PWP/TREP project impacts that will occur in the NCC, and resource preservation/enhancement opportunities (and associated cost estimates) determined appropriate for transportation-project impact mitigation and meeting permitting requirements of the regulatory agencies. These opportunities will also inherently enhance significant resources beyond traditional project mitigation requirements as a result of PWP/TREP implementation. As noted previously, the region has identified and/or secured resource preservation/enhancement opportunities in order to meet specific mitigation categories permitted for achieving no net loss under the REP; Table 6-2 lists REP opportunities for each mitigation category, as well as the endowment and technical advisory group categories.

To ensure impacts can be adequately covered in advance of any construction activity, and to provide for maximum flexibility in achieving the net benefits anticipated under this REP, the following REP opportunity types are classified in three “pools” that will ensure contingency plans are in place. In addition, the REP includes a funding opportunity for formation of an interagency Scientific Advisory Committee, which could conduct research, study and evaluation of the REP effectiveness and success.

TABLE 6-3: PWP/TREP PROJECT IMPACTS AND MITIGATION/ENHANCEMENT OPPORTUNITIES SUMMARY

MITIGATION/ENHANCEMENT OPPORTUNITIES (BY WATERSHED)		COASTAL WETLAND ACRE ESTABLISHED	COASTAL WETLAND ACRE RESTORED	COASTAL WETLAND ACRE PRESERVED/ENHANCED	TOTAL IMPACTS (LOSSAN & I-5)[1]	NO NET LOSS WETLAND BALANCE[2]	UPLAND ACRE ESTABLISHED	UPLAND ACRE RESTORED	UPLAND ACRE PRESERVED/ENHANCED	TOTAL IMPACTS (LOSSAN & I-5)[1]	NO NET LOSS UPLAND BALANCE[2]	COST ESTIMATE (INCL. RIGHT-OF-WAY & CONSTRUCTION COSTS)[3]
		WETLAND					UPLAND					
ESTABLISHMENT (NO NET LOSS) – NO NET LOSS POOL												
Los Penasquitos	Deer Canyon II						14.6					$1,600,000.00
San Dieguito	Dean Family Trust						20.8					$2,650,000.00
	San Dieguito W19	47.3					9.6	19.8				$48,600,000.00
San Elijo	Upland Restoration around Lagoon						30					$2,400,000.00
Agua Hedionda	Hallmark (East and West)	4.37	0.97				3.5	6.6				$9,600,000.00
Corridor-Wide Establishment (No Net Loss) Sub Total		51.67	0.97				78.5	26.4				$64,850,000.00
PRESERVATION & ENHANCEMENT – ENHANCEMENT POOL												
San Dieguito	Dean Family Trust								1.5			Costs identified, above.
San Elijo	Laser			0.02					4.14			$1,610,000.00
Batiquitos	La Costa								18.8			$1,430,000.00
Agua Hedionda	Hallmark (East and West)			0.44					1.8			Costs identified, above.
San Elijo Lagoon Restoration Project												$90,000,000.00[4]
Buena Vista Lagoon Restoration Project												
Corridor-Wide Preservation & Enhancement Sub Total				0.46					26.24			$93,040,000.00
BRIDGE OPTIMIZATION												
Batiquitos I-5 Bridge Lengthening		Included for project enhancement/ avoidance and minimization purposes.										$8,000,000.00
San Elijo I-5 Bridge Lengthening												$16,000,000.00
San Elijo LOSSAN Bridge Lengthening (Assumes SELRP Alt 2A)												$25,100,000.00
Buena Vista I-5 Bridge Lengthening												$7,000,000.00
Bridge Optimization Sub Total												$56,100,000.00$56,100,000.00
LAGOON MANAGEMENT ENDOWMENTS – CONTINGENCY POOL												
Regional Lagoon Maintenance Program	Batiquitos – $9.50/ cy [est.] Penasquitos – $3.90/ cy [actual]	39.8*										$10,000,000.00
Corridor-Wide Lagoon Management Endowments Sub Total		39.8*										$10,000,000.00
Corridor-Wide Project Impact vs. Habitat Establishment, Preservation, Enhancement & Lagoon Management Endowment Totals		91.47	0.97	0.46	35.66 – 41.2	51.24 – 56.78	78.5	26.4	26.24	54.99 – 75	29.9 – 49.91	$167,890,000.00
PROJECT PRIORITIZATION/ LAGOON MANAGEMENT TECHNICAL SUPPORT[5]												
Scientific Advisory Committee		Included for project enhancement purposes.										$1,000,000.00
Technical Support Sub Total												$1,000,000.00

Notes:
* Caltrans and SANDAG find that establishing an endowment should either be credited 39.8 acres based on hydraulic improvement and habitat creation as a result of maintaining the lagoon mouths at Batiquitos and Los Penasquitos Lagoons, or it is understood that this endowment would address any potential no net loss deficits between credit release and when impacts would occur, as well as any temporal impacts.
[1] Corridor-wide impacts identified for the I-5 Locally Preferred Alternative (8+4 with Buffer) combined with LOSSAN Project impacts. See Tables 4a and 4b for detailed project impacts by phase.
[2] No net loss balance totals do not include preservation acreage.
[3] Costs are identified for all opportunities, including those to be funded by Resource Enhancement Program funding (i.e., No Net Loss, Preservation & Enhancement sites, Lagoon Management Endowments, and Technical Support) or Capital funds (i.e., Bridge Optimization).
[4] These restoration planning efforts are in process, and final cost estimates are not available at this time. However, it is acknowledged that a large-scale lagoon restoration will be funded in full through the REP.
[5] An interagency advisory committee will be formed to evaluate, prioritize, and oversee the implementation of the potential no net loss, preservation and enhancement projects.

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Temporary Impacts

Temporary impacts will occur through accessing the PWP/TREP project sites and through construction activities. For purposes of adequately addressing potential temporary impacts, disturbances resulting in impacts to upland and/or wetland habitats lasting over 12 months are defined as long-term temporary impacts. An estimate of long-term temporary impacts associated with implementation of the PWP/TREP is provided in Table 6-4.

TABLE 6-4: LONG-TERM TEMPORARY IMPACTS FOR THE I-5 NCC PROJECT

Habitat Type	Long-term Temporary Impacts* (acres)
SENSITIVE UPLAND HABITATS	
Baccharis scrub	0.14
Baccharis scrub (disturbed)	1.01
Coastal sage scrub	4.06
Coastal sage scrub (disturbed)	9.20
Maritime succulent scrub	0.22
Native grassland	0.15
Southern maritime chaparral	0.47
Southern maritime chaparral (disturbed)	1.37
Total Temporary Upland Impacts	16.62
WETLAND HABITATS	
Arundo scrub	0.21
Coastal brackish marsh	0.58
Coastal brackish marsh (disturbed)	1.54
Drainage ditch	0.66
Disturbed wetland	0.73
Freshwater marsh	1.36
Freshwater marsh (disturbed)	0.38
Mudflat	0.44
Mulefat scrub	0.00
Open water	2.69
Salt flat	0.04
Coastal salt marsh	2.33
Salt marsh transition	0.21
Southern willow scrub	0.15
Southern willow scrub (disturbed)	1.38
Southern willow scrub/freshwater marsh	0.80
Tidal rip-rap at bridge abutments	0.03
Waters of the US. (unvegetated channel)	0.08
Total Temporary Wetland Impacts	13.59

* All temporary impacts likely longer than 12 months, impacts to open water may consist of a barge anchored in area

Long-term temporary impact areas will be returned to original grade and pre-existing condition elevation contours, and will be revegetated with native species. Such mitigation would include replacement of habitat after construction in the form of habitat establishment at a 1:1 replacement ratio, with the "enhancement pool" of opportunities, described below, addressing any additional temporal loss above that ratio. Nearly all construction activities will require access and staging for greater than 12 months; therefore, most temporary impacts addressed through this REP will be considered long-term temporary impacts. Short-term temporary impacts, or impacts lasting less than 12 months in duration

that do not have significant impacts to native habitats or wildlife, will be restored to pre-existing conditions once temporary impact is complete.

The enhancement pool of opportunities will include habitat preservation/enhancement credits and large-scale restoration projects including bridge optimization achieving hydraulic lift, and the enhancement pool will mitigate for long-term temporary impacts by ensuring long-term preservation/enhancement of upland ESHA and/or wetland resources in advance of construction impacts occurring. Parcels already identified for the upland preservation pool of opportunity are identified in Table 6-5. See additional discussion in Credit Establishment and Accounting, Habitat Preservation/Enhancement, below.

TABLE 6-5: SENSITIVE UPLAND AREAS TO BE PRESERVED

Parcel Name	Upland Preservation (acres)
Laser	4.1
La Costa	18.8
Dean	1.5
Hallmark	1.8
Total	26.2

REP No Net Loss Mitigation Opportunity Pool – Establishment and Restoration

The no net loss pool of opportunities includes mitigation sites that have significant establishment and/or restoration components, and would generally result in a net gain in habitat function and/or area, thereby directly offsetting permanent wetland and/or upland ESHA impacts at a 1:1 ratio.

Establishment/No Net Loss Requirement. Establishment is creation of wetland or upland ESHA habitat generally through grading, recontouring, and planting the site to establish the required physical and biological components of the habitat type. PWP/TREP project impact mitigation includes a habitat establishment component (or substantial restoration component where determined appropriate) within the corridor Coastal Zone area which achieves no net loss mitigation for wetland resource and upland ESHA impacts.

Restoration. Restoration involves the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded resource. Restoration efforts result in a gain in habitat function and habitat area.

REP Preservation and Enhancement Opportunity Pool – Preservation, Large-scale Restoration, Bridge Optimization

The preservation and enhancement pool of mitigation opportunities includes sites where permanent preservation of existing and/or potentially enhanced habitat can be demonstrated. It also includes large-scale lagoon restoration activities intended to improve corridor-wide lagoon system function and values, and bridge optimization projects designed to enhance lagoon system function and values and facilitate large-scale lagoon restoration. These opportunities would serve to mitigate for indirect impacts, temporal, and long-term temporary impacts resulting from PWP/TREP project impacts, given the resulting benefits to wetland and upland resources, water quality, increased tidal range, flood control, groundwater recharge, plant and wildlife habitat, and recreation.

Habitat Preservation. Additional PWP/TREP project impact mitigation will be fulfilled by acquisition of parcels containing high quality upland ESHA and/or wetland resources and/or parcels where

enhancement of habitat can occur within the corridor Coastal Zone area, which can be permanently preserved. Habitat preservation opportunities will serve to mitigate for temporal and temporary construction long-term impacts resulting from PWP/TREP project impacts by ensuring long-term preservation of upland ESHA and/or wetland resources in advance of construction impacts occurring.

Lagoon Restoration. In recognition of the unique opportunities and value of comprehensive lagoon restoration activities for corridor lagoons, the REP includes large-scale lagoon ecosystem restoration and enhancement mitigation opportunities which will result in significant ecological lift to the San Elijo Lagoon and Buena Vista Lagoon systems. The mitigation opportunity includes funding a large-scale lagoon restoration program in full for either San Elijo or Buena Vista Lagoons, which would be in addition to funds already contributed to previous and ongoing planning and technical evaluation activities necessary to facilitate and implement these lagoon restoration programs. Large-scale lagoon restoration in San Elijo and Buena Vista Lagoons may include, but is not limited to, enhancement, restoration, and rehabilitation of upland and wetland resources in the associated Lagoons.

In the context of the regional lagoon systems of the NCC and their proximity to the ocean, the intent of the large-scale lagoon restoration funding is to promote the ecological health and hydrological connectivity to enhance habitat for listed species. Potential Buena Vista Lagoon restoration will be eligible for inclusion in the REP, providing the Buena Vista Lagoon project results in established or restored habitat that is in alignment with resource needs in the corridor and mitigation required in association with impacts caused by the NCC program of projects. REP measures that contribute to large-scale lagoon restoration opportunities, including funding and critical transportation infrastructure improvements, shall be considered a substantial mitigation element for all PWP/TREP project impacts (including temporary long-term impacts) given the resulting wide range of benefits to sensitive habitat for plant and wildlife species, water quality, flood control, groundwater recharge, and recreation.

Bridge Optimization (Achieving Hydraulic Lift in Lagoons). Bridge optimization projects, specifically funded through capital expenditures and designed to avoid and minimize project impacts, that enhance lagoon system function and values, and facilitate large-scale lagoon restoration are proposed as a component of the enhancement opportunity pool. Bridge optimization projects involve lengthening lagoon bridges along the I-5 and LOSSAN rail corridors to improve existing tidal and fluvial flows and enhance associated wetland habitats. Aside from the inherent benefits from enhanced hydrology, improved flows may also improve the success of large-scale lagoon restoration projects, and support advanced funding for purposes of early phasing of optimized bridge designs, where feasible.

REP measures that seek to advance bridge optimization projects specifically to enhance lagoon system function and values shall contribute significantly towards mitigating all aspects of PWP/TREP project impacts, particularly for temporary impacts, shading, indirect impacts, essential fish habitat impacts, and potential temporal wetland impacts. These projects would result in a large range of benefits to wetland resources, water quality, increased tidal range, flood control, groundwater recharge, and recreation.

REP Contingency Opportunity Pool – Endowments and Other Enhancements

The contingency pool of opportunities would ensure there are no mitigation (no net loss) deficits that cannot be adequately addressed in advance of project impacts. Ideally, the contingency pool of opportunities will not be required to support or enhance the mitigation needs of PWP/TREP project implementation due to adequate site planning, monitoring and management efforts. However, the contingency pool can be used for no net loss purposes to cover any unforeseen circumstance, such as

time extensions needed to get the mitigation sites performing and/or if impacts occur prior to release of adequate mitigation credits.

Lagoon Management Endowments. The REP includes an endowment component that is intended to increase the capacity for long-term management of the Batiquitos and Los Penasquitos Lagoons and support stewardship of these resources in perpetuity. This includes, but may not be limited to, funding for maintenance of lagoon inlets and channels deemed necessary to sustain tidal and fluvial flows and reduce sedimentation within the lagoons, thereby sustaining ongoing lagoon restoration efforts. To ensure that endowment funding is effectively managed, a Long-Term Management Plan spanning 5 to 10 years of management at a time and indicating the ecological priorities and associated endowment contributions would be created, reviewed, and approved by the resource agencies. The Long-Term Management Plan would be created by the associated lagoon manager and be a living document, reflecting current conditions and needs of the lagoon ecosystem. Development of a Long-Term Management Plan for use of the funds at Batiquitos and Los Peñasquitos Lagoons would identify specific tasks covered by the proposed endowment, and would support establishment of long-term goals to ensure appropriate triggers for when dredging activities would occur and funds would be released. A performance evaluation of the endowment would also occur at the end of the first phase of the NCC Program (i.e., first 10 years) to ensure adequate financial contingencies are in place to cover activities in perpetuity.

Absent the need for contingency mitigation, lagoon management endowments are to be considered an supplemental to the enhancement component of the REP. This endowment would not be applied to the other no net loss mitigation, and preservation and enhancement projects included in this REP, as funding for those sites already reflect a separate, site-specific long-term management endowment in their project costs.

Lagoon Restoration. As discussed previously, REP measures that contribute to large-scale lagoon restoration opportunities are considered a substantial mitigation element for all PWP/TREP project impacts. Enhancement efforts within San Elijo and/or Buena Vista Lagoon that may result in a change from current conditions to historic subtidal or salt marsh habitats may also result in assignment of contingency mitigation credits, as necessary. The determination of potential future habitat changes that would qualify for contingency mitigation credit, as well as performance standards to measure and monitor the success of the restoration efforts, would occur pursuant to future NOIDs and in discussions with the REP Oversight Committee.

Other Contingency Opportunities. As part of the future Buena Vista Lagoon restoration alternatives under consideration, modifications to Coast Highway would be required, possibly including replacement of the culverts with a bridge or larger culverts. Additionally, as part of the San Elijo Lagoon restoration alternatives under consideration, modifications to Pacific Coast Highway could be required. These facilities are not within the LOSSAN or I-5 right-of-way and are therefore not included in the scope of PWP/TREP improvements. However, funding for these infrastructure improvements are included in the overall cost estimates for the Lagoon Restoration Projects, described above in the Enhancement Pool, and may be funded through the REP framework to offset potential no net loss deficits as needed.

Project Prioritization/ Lagoon Management Technical Support

Scientific Advisory Committee. The REP Working Group, discussed previously, will serve to provide REP project implementation and monitoring oversight, and advise SANDAG and Caltrans on potential resource benefits of new mitigation or enhancement opportunities. In addition, the REP includes a component to form an interagency advisory committee to evaluate, prioritize, and oversee the

implementation of the pool of mitigation projects. The REP funds would cover expenses of researchers charged with conducting research, study and evaluation of the REP effectiveness and success.

6.2.2.6 Resource Enhancement Program Mitigation Opportunities Evaluation Framework

SANDAG and Caltrans, in consultation with the resource agencies, have developed a suite of REP evaluation classifications to assist in matching the various mitigation opportunities identified for the NCC PWP/TREP with the type and/or level of impact and timing of implementation.

Mitigation Opportunity Asset Evaluation

The list below defines the criteria used to assess the various types of mitigation opportunities available to meet the needs of the NCC PWP/TREP. The mitigation opportunity assets have been broken down into categories to clearly demarcate and define the suite of opportunities that are available to mitigate for the various types of impacts that are expected with implementation of the Project. Table 6-6 lists each REP opportunity by site name, outlines the type of associated mitigation anticipated on-site, and identifies the evaluated assets that are provided by that particular opportunity.

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TABLE 6-6: RESOURCE ENHANCEMENT PROGRAM – MITIGATION OPPORTUNITIES ASSESSMENT

Mitigation Opportunity Name	Mitigation Opportunity Type				Mitigation Opportunity Assets					
	Promotes No-Net Loss of Habitat through Establishment	Promotes Restoration within NCC	Promotes Preservation/ Enhancement within NCC	Promotes Optimization Goal for Hydraulic Lift	"Shovel Ready"	Stakeholder Support	Watershed-Focused Ecosystem Enhancement	High Ecological Cost to Benefit Ratio	Long-term Maintenance & Management	Provides a Unique Value/Lost Opportunity
Establishment / No Net Loss – No Net Loss Pool										
San Dieguito Lagoon W19	Upland (9.6 ac) & wetland (47.3 ac) establishment	Upland (19.8) enhancement			Site secured and planning underway	SANDAG/CT/resource agencies in discussions to move forward with conceptual plans	Provides connectivity to adjacent lagoon system enhancement efforts (SONGS)	58 ac establishment (wetland & upland) at approx. $713K per ac	SANDAG/CT will provide management endowment to be managed by San Dieguito JPA	Supports ongoing enhancement efforts & improves tidal function
Hallmark (East/West)	Upland (3.5 ac) & wetland (4.37 ac) establishment	Upland (6.6 ac) & wetland (0.97 ac) enhancement	Upland (1.8 ac) & wetland (0.44 ac) preservation		Sites purchased and planning underway; I-5 NCC Project EIR/EIS underway	SANDAG/CT/resource agencies in discussions to move forward with conceptual plans	Provides connectivity to adjacent lagoon system	17.68 ac establishment, enhancement & preservation (upland & wetland) at approx. $543K per ac	SANDAG/CT will provide management endowment	Extinguishes development potential near Agua Hedionda & preserves high quality habitat
Dean Family Trust	Upland establishment (20.8 ac)		Upland preservation (1.5 ac)		Site purchased and planning underway; I-5 NCC Project EIR/EIS underway	SANDAG/CT/resource agencies in discussions to move forward with conceptual plans	Provides connectivity to adjacent lagoon system enhancement efforts (SONGS)	22.3 ac establishment & preservation (upland) at approx. $119K per ac	SANDAG/CT will provide management endowment	Extinguishes development potential near San Dieguito & preserves high quality habitat
San Elijo Uplands	Upland establishment (30 ac) at 1-3 sites adjacent San Elijo Lagoon				I-5 NCC Project EIR/EIS underway	SANDAG/CT/resource agencies in discussions to move forward with conceptual plans	Provides connectivity to adjacent lagoon system and future enhancement efforts (SELRP)	30 ac establishment (upland) at approx. $80K per ac	SANDAG/CT will provide management endowment as part of SELRP	Extinguishes development potential near San Elijo & preserves high quality habitat
Deer Canyon II	Upland establishment (14.6 ac)				Site in escrow for purchase and planning underway	SANDAG/CT/resource agencies in discussions to move forward with conceptual plans	Provides connectivity to adjacent Pardee/Deer Canyon enhancement efforts in Penasquitos watershed	14.6 ac establishment (upland) at approx. $110K per ac	SANDAG/CT will provide management endowment after site is restored and turned over to City of San Diego	Expands establishment of uplands in the Carmel Creek drainage of the Penasquitos watershed & supports ongoing enhancement efforts
Restoration & Preservation/Enhancement – Enhancement Pool										
Laser			Upland (4.4 ac) & wetland (0.02) preservation		Site purchased; I-5 NCC Project EIR/EIS underway	SANDAG/CT/resource agencies in discussions to move forward with long-term management	Provides connectivity to adjacent lagoon system and future enhancement efforts (SELRP)	4.42 ac preservation (upland & wetland) at approx. $322K per ac	SANDAG/CT will provide management endowment to San Elijo Lagoon Conservancy for management	Extinguishes development potential near San Elijo & preserves high quality habitat
La Costa			Upland preservation (18.8 ac)		Site purchased; I-5 NCC Project EIR/EIS underway	SANDAG/CT/resource agencies in discussions to move forward with long-term management	Provides connectivity to adjacent lagoon system and ongoing enhancement/ maintenance efforts	19.8 ac preservation (upland) at approx. $72K per ac	SANDAG/CT will provide management endowment	Extinguishes development potential near Batiquitos & preserves high quality habitat
San Elijo Lagoon Restoration Project (SELRP)		Offers large-scale upland and wetland establishment & enhancement at San Elijo Lagoon			Environmental permit review processes underway (pending selection of alternative)	Strong support associated with SELRP	Facilitates system-wide improvements associated with SELRP	Pending selection of alternative & approval of conceptual plans by resource agencies	SANDAG/CT will provide management endowment as part of SELRP	Supports ongoing enhancement efforts & provides new hydraulic connections and halts loss of mudflat habitat
Buena Vista Lagoon Restoration Project		Offers large-scale wetland establishment & enhancement at Buena Vista Lagoon			Environmental permit review processes underway (pending selection of alternative)	Strong support associated with BVLRP	Facilitates system-wide improvements (pending selection of alternative)	Pending selection of alternative & approval of conceptual plans by agencies	SANDAG/CT will provide management endowment as part of BVLRP	Supports ongoing enhancement efforts

TABLE 6-6: RESOURCE ENHANCEMENT PROGRAM – MITIGATION OPPORTUNITIES ASSESSMENT (CONTINUED)

Mitigation Opportunity Name	Mitigation Opportunity Type				Mitigation Opportunity Assets					
	Promotes No-Net Loss of Habitat through Establishment	Promotes Restoration within NCC	Promotes Preservation/ Enhancement within NCC	Promotes Optimization Goal for Hydraulic Lift	"Shovel Ready"	Stakeholder Support	Watershed-Focused Ecosystem Enhancement	High Ecological Cost to Benefit Ratio	Long-term Maintenance & Management	Provides a Unique Value/Lost Opportunity
Bridge Optimization										
Batiquitos I-5 Bridge Lengthening				Meets optimization goals for lagoon	Optimization study complete; I-5 NCC Project EIR/EIS underway	Strong support amongst resource agencies & lagoon foundations	Provides new intertidal habitat, reduces tidal muting/lag times & reduces historic wetland fill	Based on current and ongoing maintenance & dredging programs	SANDAG/CT will provide management endowment to support ongoing maintenance	Supports ongoing enhancement efforts & provides new hydraulic connections
San Elijo I-5 Bridge Lengthening (See Lagoon Restoration Above)	Supports establishment efforts within San Elijo through increasing hydrology	Supports enhancement efforts within San Elijo through increasing hydrology		Meets optimization goals for lagoon restoration alternatives	Optimization study complete; I-5 NCC Project EIR/EIS and San Elijo Lagoon Restoration Project EIR/EIS underway	Strong support amongst resource agencies & lagoon foundations	Facilitates SELRP, reduces tidal muting/lag times & reduces historic wetland fill	Pending selection of SELRP alternative; proposed bridge length same for all alternatives	SANDAG/CT will provide management endowment to support ongoing maintenance	Supports ongoing enhancement efforts & provides new hydraulic connections
San Elijo LOSSAN Bridge Lengthening (Assumes SELRP Alt 2A)	Supports establishment efforts within San Elijo through increasing hydrology	Supports enhancement efforts within San Elijo through increasing hydrology		Meets optimization goals for lagoon restoration alternatives	Optimization study complete; San Elijo Lagoon Restoration Project EIR/EIS underway	Strong support amongst resource agencies & lagoon foundations	Facilitates SELRP, reduces tidal muting/lag times & reduces historic wetland fill	Pending selection of SELRP alternative	SANDAG/CT will provide management endowment to support ongoing maintenance	Supports ongoing enhancement efforts & provides new hydraulic connections
Buena Vista I-5 Bridge Lengthening				Meets optimization goals for potential future enhancement project alternatives	Optimization study complete; I-5 NCC Project EIR/EIS underway	Strong support amongst resource agencies	Facilitates Buena Vista Lagoon enhancement and fluvial flows			Supports potential future lagoon enhancement efforts
Lagoon Management Endowments – Contingency Pool										
Lagoon Management/ Endowment for Los Penasquitos and Batiquitos Lagoons		Offers restoration and enhancement through inlet maintenance/ dredging in accordance with agency requirements		Meets optimization goals for lagoons for long-term maintenance and enhancement	An endowment account and an oversight committee could be established	Strong support amongst resource agencies & lagoon foundations	Facilitates system-wide improvements through ongoing maintenance	Based on current and ongoing maintenance & dredging programs	SANDAG/CT will provide management endowment to support ongoing maintenance	Supports ongoing enhancement efforts & provides continued funding to assure uninterrupted hydraulic connections

Mitigation Opportunity Assets

1. Opportunities that are “shovel ready.” “Shovel ready” describes mitigation opportunity areas that have been secured, purchased, and/or are in escrow. This also reflects that substantial completion of environmental, planning and design of the mitigation opportunities through parallel, subsequent or separate permitting and approval processes is underway.
2. Opportunities with strong stakeholder support. Mitigation opportunities that have stakeholder support are those that have willing landowner(s), are supported by elected officials and community members (as declared in public hearings), and/or have funding or expressed support from other stakeholders, people, or entities potentially affected by the proposed actions.
3. Opportunities that provide significant watershed-focused ecosystem improvements. Within the watersheds of the NCC, several system-wide, watershed-focused mitigation opportunities exist. These projects serve to substantially restore, enhance, and protect different habitat types within the specific lagoon ecosystem where the impacts occur. Watershed-wide programs would result in the establishment, restoration and enhancement of an integrated ecosystem, providing improved habitat for a suite of functions typically provided by the affected aquatic resource. Though these opportunities are larger scale, mitigation with a system-wide focus will still aim to be located where it is most likely to successfully replace lost functions and services due to the impact, taking into account watershed scale features such as aquatic habitat diversity, habitat connectivity, relationships to hydrologic sources, trends in land use, ecological benefits, and compatibility with adjacent land uses.
4. Opportunities with high ecological benefit for a given expenditure of funding resources. This asset depicts the cost associated with the mitigation opportunity benefit on a per acre basis to allow for an ecological benefit to cost analysis.
5. Opportunities with high degree of sustainability for long-term maintenance and management. Mitigation projects that will sustain long-term maintenance and management are those projects that have a supportive economic structure and/or are those that are managed through a long-term land trust, dedicated to protecting and enhancing the mitigation areas once the opportunities are installed and completed. Opportunities with a high degree of long-term sustainability are usually those that are financially supported through membership and/or through a foundation (e.g. San Elijo Lagoon Foundation). The long-term maintenance and management mitigation opportunities intend to support stewardship of these resources in perpetuity. This includes funding for maintenance of lagoon inlets and channels deemed necessary to sustain tidal and fluvial flows and reduce sedimentation within the lagoons, thereby sustaining ongoing lagoon restoration efforts.
6. Opportunities that provide a unique value that would not likely be available or would be more costly in the future (e.g., a lost opportunity). Several mitigation opportunities extinguish development potential through preservation efforts and/or conservation easements post-mitigation efforts.

Table 6-6 lists the proposed suite of opportunities and their associated Resource Enhancement Program funding and capital costs. Table 6-7 and Table 6-8 aim to depict the differences in opportunities, exhibiting those that sustain a stronger nexus for meeting the most critical ecological needs while respecting the phasing requirements for transportation-project development identified in the PWP/TREP, and greater feasibility and flexibility for timely resource mitigation project implementation.

TABLE 6-7: RESOURCE ENHANCEMENT PROGRAM MITIGATION PROJECT PRIORITIZATION

Resource Enhancement Program Mitigation/Enhancement Project	Resource Enhancement Program Funding (Millions $2012)	Resource Enhancement Program Capital Cost (Millions $2012)
Establishment / No Net Loss[1] - No Net Loss Pool		
San Dieguito Lagoon W19 Restoration Site	$48.6[2]	—
Hallmark East and West Mitigation Site	$9.6	—
Dean Parcel Mitigation Site	$2.65	—
San Elijo Uplands Mitigation Site	$2.4	—
Deer Canyon II Mitigation Site	$1.6	—
Subtotal	$16.25	—
Preservation & Enhancement – Enhancement Pool		
Laser Parcel Preservation Site	$1.61	—
La Costa Parcel Preservation Site	$1.43	—
San Elijo Lagoon Restoration Project	$90.0[3]	—
Buena Vista Lagoon Restoration Project		—
Subtotal	$903.04	—
Bridge Optimization		
Batiquitos I-5 Bridge Lengthening	—	$8.0
San Elijo I-5 Bridge Lengthening	—	$16.0
San Elijo LOSSAN Bridge Lengthening Assumes SELRP Alt 2A	—	$25.1
Buena Vista I-5 Bridge Lengthening	—	$7.0
Subtotal	—	*$56.1*
Lagoon Management Endowments – Contingency Pool		
Lagoon Management/Endowment for Los Penasquitos & Batiquitos Lagoons	$10.0	—
Subtotal	$10.0$10.00	—
Project Prioritization/Lagoon Management Technical Support[4]		
Scientific Advisory Committee	$1.0	—
Subtotal	$1.0	—
PROGRAM TOTAL	$168.89	$56.1

1 All no net loss mitigation sites, as well as preservation/enhancement sites include funding for long-term maintenance and management efforts.

2 This cost could be increased if SCE requires SANDAG to pay for a portion of lagoon mouth restoration.

3 These restoration planning efforts are in process, and final cost estimates are not available at this time. However, it is acknowledged that a large-scale lagoon restoration will be funded in full through the REP. Potential restoration at Buena Vista Lagoon will be eligible for inclusion in the REP providing the Buena Vista project results in created or restored habitat that is in alignment with resource needs in the corridor (and impacts caused by the NCC program of improvements).

4 An interagency advisory committee will be formed to evaluate, prioritize, and oversee the implementation of the potential establishment (no net loss), restoration, and preservation/enhancement projects.

TABLE 6-8A: PERMANENT WETLAND IMPACTS VS. MITIGATION (BY YEAR/PHASE)

Phase	Transportation Improvements	Impacts (Acres)	Mitigation Site	Wetland Establishment (Acres)	Wetland Restoration (Acres)	Available No Net Loss Mitigation (Year 1 After Construction @ 40%)	Available No Net Loss Mitigation (Year 1 Monitoring @ 15%)	Available No Net Loss Mitigation (Year 2 Monitoring @ 15%)	Available No Net Loss Mitigation (Year 3 Monitoring @ 15%)	Available No Net Loss Mitigation (Year 4 Monitoring @ 10%)	Available No Net Loss Mitigation (Year 5 Monitoring @ 5%)
2010-2020	YEAR 2013										
	Oceanside Through Track (2013)	0	None underway	0	0	0					
	Poinsettia Station Improvements (2013)	0									
	TOTAL IMPACT (2013)	0	TOTAL AVAILABLE MITIGATION (2013)			0					
			TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)			0					
	YEAR 2014										
	2 HOV from Lomas Santa Fe to Union St, including San Elijo Bridge Replacement, Manchester DAR, bike paths/trails & ultimate grading (Phase 1A: 2014-2017)	0.53	Hallmark (Agua Hedionda)	4.37	0.97	2.14					
	1 HOV from Union St to SR 78 (Phase 1B: 2014-2017)	0.79	Regional Lagoon Maintenance Program (Endowment Established; *10% Proposed for Release Upon Establishment, under Contingency)	39.8	0	3.98*					
	CP Cardiff to CP Craven - San Elijo Lagoon Double Track (2014)	4.47									
	TOTAL IMPACT (2014)	5.79	TOTAL AVAILABLE MITIGATION (2014)			6.12					
			TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2013 + 2014 IMPACTS SUBTRACTED)			0.33					
	YEAR 2015										
	2 HOV from La Jolla Village Dr to I-5/I-805 merge, includes Voigt DAR & I-5 /I-805 HOV Flyover Connector (Phase 1C: 2015-2020)	0.13	Hallmark (Agua Hedionda)	Ongoing; year 1 monitoring			0.80				
	CP Eastbrook to CP Shell Double-Track (2015)	0.36	Regional Lagoon Maintenance Program	Ongoing; credit released when adequate funds established in escrow account and/or contingencies required							
	Carlsbad Village Double-Track, includes Buena Vista Bridge Replacement (2015)	0.26	San Dieguito W19 (San Dieguito)	47.3	0	18.92					
	TOTAL IMPACT (2015)	0.75	MITIGATION RELEASED BY YEAR (2015)			18.92	0.80				
							TOTAL AVAILABLE MITIGATION (2015)	19.72			
							AVAILABLE MITIGATION SUBTOTAL (2014 ROLLOVER + 2015)	20.05			
							TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2015 IMPACTS SUBTRACTED)	19.3			
	YEAR 2016										
	CP Ponto to CP Moonlight Double-Track, includes Batiquitos Bridge Replacement (2016)	0.01	Hallmark (Agua Hedionda)	Ongoing; year 2 monitoring				0.80			
	Encinitas Station Parking	0	Regional Lagoon Maintenance Program	Ongoing; credit released when adequate funds established in escrow account and/or contingencies required							
	Solana Beach Station Parking	0	San Dieguito W19 (San Dieguito)	Ongoing; year 1 monitoring			7.09				
	San Dieguito Bridge/Double-Track, includes San Dieguito Lagoon Bridge Replacement (2016)	2.35									
	TOTAL IMPACT (2016)	2.36	MITIGATION RELEASED BY YEAR (2016)				7.09	0.80			
								TOTAL AVAILABLE MITIGATION (2016)	7.89		
								AVAILABLE MITIGATION SUBTOTAL (2015 ROLLOVER + 2016)	27.19		
								TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2016 IMPACTS SUBTRACTED)	24.83		
	INITIAL-TERM TOTAL IMPACT	8.9								INITIAL-TERM TOTAL MITIGATION	92.44

TABLE 6-8A: PERMANENT WETLAND IMPACTS VS. MITIGATION (BY YEAR/PHASE) (CONTINUED)

Phase	Transportation Improvements	Impacts (Acres)	Mitigation Site	Wetland Establishment (Acres)	Wetland Restoration (Acres)	Available No Net Loss Mitigation (Year 1 After Construction @ 40%)	Available No Net Loss Mitigation (Year 1 Monitoring @ 15%)	Available No Net Loss Mitigation (Year 2 Monitoring @ 15%)	Available No Net Loss Mitigation (Year 3 Monitoring @ 15%)	Available No Net Loss Mitigation (Year 4 Monitoring @ 10%)	Available No Net Loss Mitigation (Year 5 Monitoring @ 5%)
2021-2030	2 ML from I-5/I-805 to SR 56, including new Sorrento Valley Road bike/maintenance vehicle bridge, trails under I-5 at Carmel Creek, widening of I-5 at Carmel Creek, and trail under merge (Phase 2A: 2020-2022)	+0.41 (creation)	Hallmark (Agua Hedionda) San Dieguito W19 (San Dieguito) Regional Lagoon Maintenance Program	Ongoing		Full mitigation/sign-off anticipated by 2021					
	2 ML from SR 56 to Lomas Santa Fe Dr, including San Dieguito River Bridge Widening and bike paths/trails (Phase 2B: 2020-2025)	3.59									
	2 ML from Union St to Palomar Airport Rd, including Batiquitos Lagoon Bridge Replacement (Phase 2C: 2025-2030; if not advanced, see separate line item below)	1.33									
	*Batiquitos Lagoon Bridge Replacement (Phase 2D: 2025-2030; if completed separately)	*4.78									
	Oceanside Station Parking	0									
	Carlsbad Village Station Parking	0									
	Carlsbad Poinsettia Station Parking	0									
	CP Moonlight to CP Swami Double-Track	0									
	Del Mar Fairgrounds Platform	0									
	MID-TERM TOTAL IMPACT (WITH ADVANCING BATIQUITOS BRIDGE)	4.51	MID-TERM TOTAL AVAILABLE MITIGATION								83.54
	TOTAL MID-TERM ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)										79.03
	MID-TERM TOTAL IMPACT (WITHOUT ADVANCING BATIQUITOS BRIDGE)	9.29	MID-TERM TOTAL AVAILABLE MITIGATION								83.54
	TOTAL MID-TERM ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)										74.25
2031-2040	2-4 ML from Palomar Airport Rd to SR 76, includes Agua Hedionda & Buena Vista Lagoon Bridge Replacements (Phase 3A-3C: 2030-2035)	5.76	Hallmark (Agua Hedionda) San Dieguito W19 (San Dieguito) Regional Lagoon Maintenance Program	Ongoing		Full mitigation /sign-off anticipated by 2021					
	Construct Braided Ramps from Roselle to Genesee (Phase 3D: 2030-2035)	1.11									
	LONG-TERM TOTAL IMPACT	6.87	LONG-TERM TOTAL AVAILABLE MITIGATION								74.25 – 79.03
	TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)										67.38 – 72.16
	NCC TOTALS (ALL PHASES EXCLUDING VISION & WITH ADVANCING BATIQUITOS BRIDGE)	20.28	Sites identified above.	91.47	0.97	92.44					
	NCC TOTALS (ALL PHASES EXCLUDING VISION & WITHOUT ADVANCING OF BATIQUITOS BRIDGE)	25.06	Sites identified above.	91.47	0.97	92.44					
2041-2050	Leucadia Blvd Grade Separation	0	Hallmark (Agua Hedionda) San Dieguito W19 (San Dieguito) Regional Lagoon Maintenance Program	Ongoing		Full mitigation /sign-off anticipated by 2021					
	Del Mar Tunnel - Camino Del Mar / Penasquitos Double-Track Option - I-5 / Penasquitos Option	2.01-2.77									
	Penasquitos Double-Track	9.87									
	I-5/SR-78	3.5									
	VISION TOTAL IMPACT	15.38 – 16.14	VISION TOTAL AVAILABLE MITIGATION								67.38 – 72.16
	TOTAL "ENHANCEMENT" FOLLOWING PROGRAM IMPLEMENTATION										51.24 – 56.78

TABLE 6-8B: PERMANENT UPLAND IMPACTS VS. MITIGATION (BY YEAR/PHASE)

Phase	Transportation Improvements	Impacts (Acres)	Mitigation Site	Upland Establishment (Acres)	Upland Restoration (Acres)	Total Available No Net Loss Mitigation (Year 1 After Construction @ 40%)	Total Available No Net Loss Mitigation (Year 1 Monitoring @ 15%)	Total Available No Net Loss Mitigation (Year 2 Monitoring @ 15%)	Total Available No Net Loss Mitigation (Year 3 Monitoring @ 15%)	Total Available No Net Loss Mitigation (Year 4 Monitoring @ 10%)	Total Available No Net Loss Mitigation (Year 5 Monitoring @ 5%)
2010-2020	YEAR 2013										
	5a - Oceanside Through Track (2013)	0	Deer Canyon II (Los Penasquitos)	14.6	0	5.84					
	35 - Poinsettia Station Improvements (2013)	0	Dean Family Trust (San Dieguito)	20.8	0	8.32					
	TOTAL IMPACT (2013)	0	TOTAL AVAILABLE MITIGATION (2013)			14.16					
			TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2013 IMPACTS SUBTRACTED)			14.16					
	YEAR 2014										
	2 HOV from Lomas Santa Fe to Union St, including San Elijo Bridge Replacement, Manchester DAR, bike paths/trails & ultimate grading (Phase 1A: 2014-2017)	22.08	Deer Canyon II (Los Penasquitos)	Ongoing; year 1 monitoring			2.19				
	1 HOV from Union St to SR 78 (Phase 1B: 2014-2017)	1.06	Dean Family Trust (San Dieguito)	Ongoing; year 1 monitoring			3.12				
	15 - CP Cardiff to CP Craven - San Elijo Lagoon Double Track (2014)	0	Hallmark (Agua Hedionda)	3.5	6.6	4.04					
			Upland Restoration (San Elijo)	30	0	12					
	TOTAL IMPACT (2014)	23.14	MITIGATION RELEASED BY YEAR (2014)			16.04	5.31				
			TOTAL AVAILABLE MITIGATION (2014)				21.35				
			AVAILABLE MITIGATION SUBTOTAL (2013 ROLLOVER + 2014)				35.51				
			TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2014 IMPACTS SUBTRACTED)				12.37				
	YEAR 2015										
	2 HOV from La Jolla Village Dr to I-5/I-805 merge, includes Voigt DAR & I-5 /I-805 HOV Flyover Connector (Phase 1C: 2015-2020)	0.57	Deer Canyon II (Los Penasquitos)	Ongoing; year 2 monitoring				2.19			
	3 - CP Eastbrook to CP Shell Double Track (2015)	0	Dean Family Trust (San Dieguito)	Ongoing; year 2 monitoring				3.12			
	6 - Carlsbad Village Double Track, includes Buena Vista Bridge Replacement (2015)	0	Hallmark (Agua Hedionda)	Ongoing; year 1 monitoring			1.515				
			Upland Restoration (San Elijo)	Ongoing; year 1 monitoring			4.5				
			San Dieguito W19 (San Dieguito)	9.6	19.8	11.76					
	TOTAL IMPACT (2015)	0.57	MITIGATION RELEASED BY YEAR (2015)			11.76	6.015	5.31			
			TOTAL AVAILABLE MITIGATION (2015)					23.09			
			AVAILABLE MITIGATION SUBTOTAL (2014 ROLLOVER + 2015)					35.46			
			TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)					34.89			
	YEAR 2016										
	10 - CP Ponto to CP Moonlight Double Track, includes Batiquitos Bridge Replacement (2016)	0.03	Deer Canyon II (Los Penasquitos)	Ongoing; year 3 monitoring					2.19		
	13 - Encinitas Station Parking	0	Dean Family Trust (San Dieguito)	Ongoing; year 3 monitoring					3.12		
	16 - Solana Beach Station Parking	0	Hallmark (Agua Hedionda)	Ongoing; year 2 monitoring				1.515			
	17 - San Dieguito Bridge/Double Track, includes San Dieguito Bridge Replacement (2016)	0.01	Upland Restoration (San Elijo)	Ongoing; year 2 monitoring				4.5			
			San Dieguito W19 (San Dieguito)	Ongoing; year 1 monitoring			4.41				
	TOTAL IMPACT (2016)	0.04	MITIGATION RELEASED BY YEAR (2016)				4.41	6.02	5.31		
			TOTAL AVAILABLE MITIGATION (2016)						15.74		
			AVAILABLE MITIGATION SUBTOTAL (2015 ROLLOVER + 2016)						50.63		
			TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)						50.59		
	INITIAL-TERM TOTAL IMPACT	23.75	INITIAL-TERM TOTAL MITIGATION								104.9

TABLE 6-8B: PERMANENT UPLAND IMPACTS VS. MITIGATION (BY YEAR/PHASE) (CONTINUED)

Phase	Transportation Improvements	Impacts (Acres)	Mitigation Site	Upland Establishment (Acres)	Upland Restoration (Acres)	Total Available No Net Loss Mitigation (Year 1 After Construction @ 40%)	Total Available No Net Loss Mitigation (Year 1 Monitoring @ 15%)	Total Available No Net Loss Mitigation (Year 2 Monitoring @ 15%)	Total Available No Net Loss Mitigation (Year 3 Monitoring @ 15%)	Total Available No Net Loss Mitigation (Year 4 Monitoring @ 10%)	Total Available No Net Loss Mitigation (Year 5 Monitoring @ 5%)
2021-2030	2 ML from I-5/I-805 to SR 56, including new Sorrento Valley Road bike/maintenance vehicle bridge, trails under I-5 at Carmel Creek, widening of I-5 at Carmel Creek, and trail under merge (Phase 2A: 2020-2022)	0.99	Deer Canyon II (Los Penasquitos) Dean Family Trust (San Dieguito) Hallmark (Agua Hedionda) Upland Restoration (San Elijo) San Dieguito W19 (San Dieguito)	Ongoing		Full mitigation /sign-off anticipated by 2021					
	2 ML from SR 56 to Lomas Santa Fe Dr, including San Dieguito River Bridge Widening and bike paths/trails (Phase 2B: 2020-2025)	20.6									
	2 ML from Union St to Palomar Airport Rd, including Batiquitos Lagoon Bridge Replacement (Phase 2C: 2025-2030; if not advanced, see separate line item below)	3.28									
	*Batiquitos Lagoon Bridge Replacement (Phase 2D: 2025-2030; if completed separately)	*9.91									
	5b - Oceanside Station Parking	0									
	7 - Carlsbad Village Station Parking	0									
	9 - Carlsbad Poinsettia Station Parking	0									
	14 - CP Moonlight to CP Swami Double Track	0									
	18 - Del Mar Fairgrounds Platform	0									
	MID-TERM TOTAL IMPACT (WITH ADVANCING BATIQUITOS BRIDGE)	24.87	MID-TERM TOTAL AVAILABLE MITIGATION								81.15
	TOTAL MID-TERM ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)										56.28
	MID-TERM TOTAL IMPACT (WITHOUT ADVANCING BATIQUITOS BRIDGE)	34.78	MID-TERM TOTAL AVAILABLE MITIGATION								81.15
	TOTAL MID-TERM ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)										46.37
2031-2040	2-4 ML from Palomar Airport Rd to SR 76, includes Agua Hedionda & Buena Vista Lagoon Bridge Replacements (Phase 3A-3C: 2030-2035)	0.77	Deer Canyon II (Los Penasquitos) Dean Family Trust (San Dieguito) Hallmark (Agua Hedionda) Upland Restoration (San Elijo) San Dieguito W19 (San Dieguito)	Ongoing		Full mitigation /sign-off anticipated by 2021					
	Construct Braided Ramps from Roselle to Genesee (Phase 3D: 2030-2035)	5.57									
	LONG-TERM TOTAL IMPACT	6.34	LONG-TERM TOTAL AVAILABLE MITIGATION								46.37 – 56.28
	TOTAL LONG-TERM ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)										40.03 – 49.98
	NCC TOTALS (ALL PHASES EXCLUDING VISION & WITH ADVANCING BATIQUITOS BRIDGE)	54.96	Sites identified above.	78.5	26.4	104.9					
	NCC TOTALS (ALL PHASES EXCLUDING VISION & WITHOUT ADVANCING OF BATIQUITOS BRIDGE)	64.87	Sites identified above.	78.5	26.4	104.9					
2041-2050	11 - Leucadia Blvd Grade Separation	0	Deer Canyon II (Los Penasquitos) Dean Family Trust (San Dieguito) Hallmark (Agua Hedionda) Upland Restoration (San Elijo) San Dieguito W19 (San Dieguito)	Ongoing		Full mitigation /sign-off anticipated by 2021					
	20/21 - Del Mar Tunnel -Camino Del Mar / Penasquitos Double Track Option -I-5 / Penasquitos Option	0.03 - 10.13									
	22b - Penasquitos Double Track	0									
	I-5/SR-78	0									
	VISION TOTAL IMPACT	0.03 - 10.13	VISION TOTAL AVAILABLE MITIGATION								40.03 – 49.98
	TOTAL "ENHANCEMENT" FOLLOWING PROGRAM IMPLEMENTATION										29.9 – 49.95

Potential Mitigation Opportunities

It is recognized that new opportunities for various types of resource improvements may become available in the corridor after adoption of the PWP/TREP, due to factors such as additional funding availability, completed habitat restoration plans, or land acquisition options. In addition, some mitigation opportunities which would promote large-scale ecological improvements to resources may be considered more critical for the region, while others which would contribute to enhancing a smaller area within the corridor may be considered less critical for achieving regional goals. Widespread improvements to natural resources in the NCC require a unique, comprehensive approach to resource enhancement with input from multiple regulatory agencies and stakeholders. These factors make it necessary to maintain flexibility when considering the most appropriate mitigation opportunity.

The REP is the framework used to describe the available resource enhancement opportunities on a corridor-wide level based on these evolving factors. The REP framework provides for supplementing the mitigation opportunities package when new opportunities arise, which could be authorized pursuant to future project-specific NOIDs for PWP projects, CDPs, or federal consistency review, as applicable (see REP Implementation Framework section below).

6.2.2.7 Resource Enhancement Program Implementation Framework

The REP Implementation Framework includes, as an integral element of the PWP/TREP phasing plan, advanced resource enhancement activities intended to provide early mitigation to compensate for resource impacts resulting from PWP/TREP transportation and community enhancement project construction. Advanced resource enhancement activities will provide significant benefits to coastal resources within the NCC, avoiding temporal losses of resource areas that may otherwise temporarily decrease habitat function and value on-the-ground until mitigation activities that increase habitat function and value are completed. In addition, implementation of multiple transportation projects requires consideration of their synergy with other planned improvements in the corridor. For example, replacement and optimization of the I-5 bridge at San Elijo Lagoon should be timed concurrent with the replacement and optimization of the LOSSAN bridge, as well as implementation of the San Elijo Lagoon Restoration Project, to avoid unnecessary impacts in the lagoon and better ensure restoration project success.

The REP Implementation Framework is designed to achieve four primary objectives:

- To initiate the process of implementing mitigation opportunities immediately upon PWP/TREP approval to achieve advanced mitigation.
- To contribute to a PWP/TREP phasing plan that appropriately balances project implementation to achieve the mobility and natural resource needs of the NCC.
- To establish a track record of effective project implementation and stewardship.
- To provide the basis for monitoring and adaptive management that will inform the PWP/TREP implementation process as to the effectiveness of specific mobility improvements and resource enhancement efforts.

Tables 6-7A and 6-7B identify the PWP/TREP Phasing Plan and associated transportation and community enhancement project impacts, against the amount of no net loss mitigation anticipated to be available for each phase of PWP/TREP project impacts as established for individual REP projects (see also Credit Establishment and Accounting Section, below).

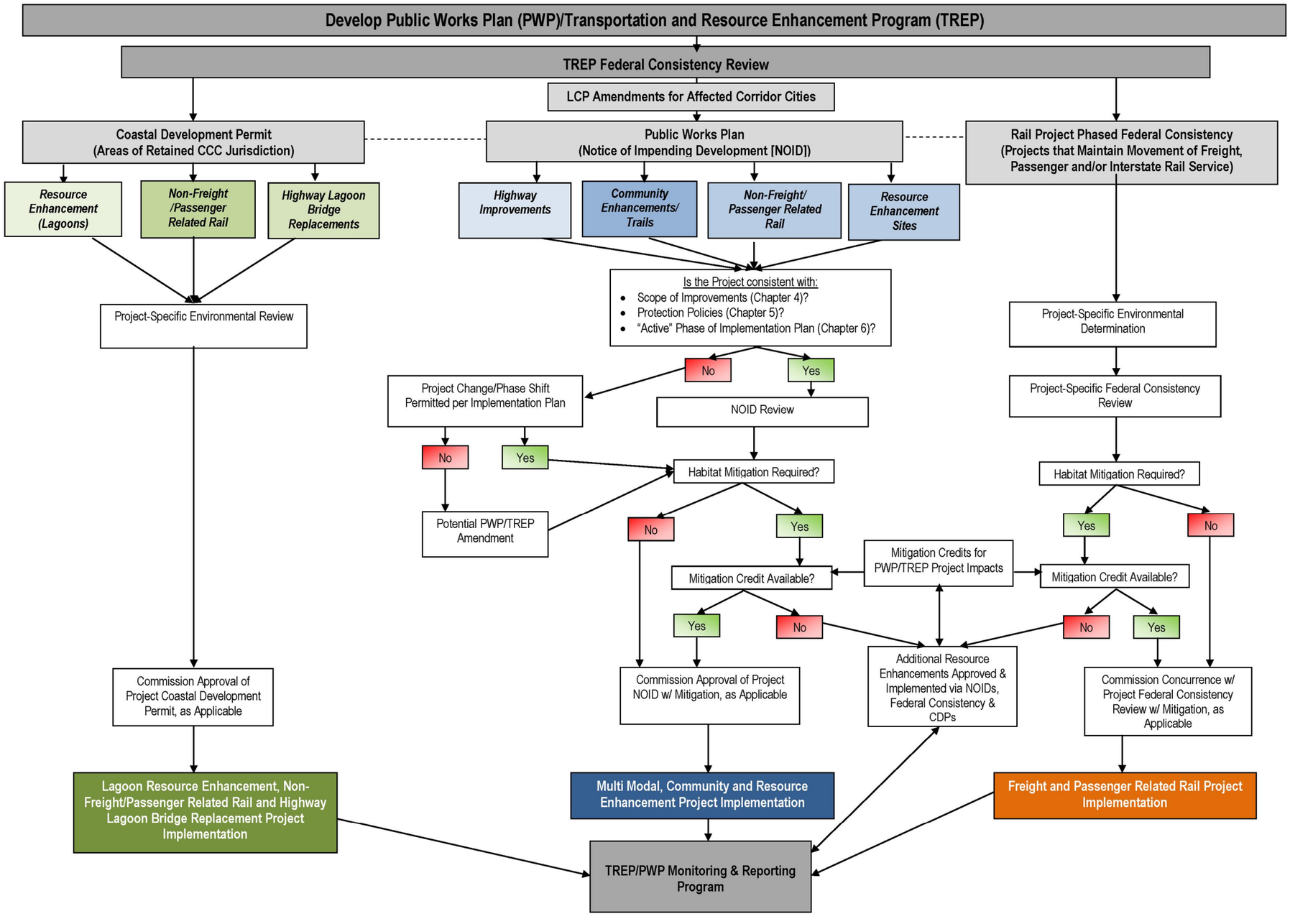
Accounting of REP project implementation, credit establishment and release, maintenance and monitoring will be tracked and reported pursuant to NOID submittals for all PWP/TREP projects to ensure the overall program implementation is consistent with approved impacts, and meets required mitigation and resource benefits identified in the PWP/TREP Phasing Plan. Each no net loss mitigation site will have its own funding and mitigation and monitoring plan with remedial measures in the event the site is not attaining its goals. If a site develops a fatal flaw that cannot be corrected on-site, SANDAG/Caltrans will identify and implement mitigation at another location. In most cases, problems on a mitigation site can be corrected on-site through additional grading, planting, weeding, or soil amendment. In addition, funding could be shifted between projects if a project proposed now is not carried forward for some reason. In addition, the PWP/TREP Implementation Framework ensures that all REP projects are reviewed and monitored as part of the development review process for all other projects included in the PWP/TREP, regardless of the specific Coastal Commission approval process required for each REP project (see Figure 6-3 for an overview of the TREP, PWP/NOID, and CDP approval processes).

Credit Establishment and Accounting

Habitat Establishment and Restoration - No Net Loss Requirement. Mitigation credits available for no net loss compensatory mitigation are based on the number of acres available for each habitat type on the proposed mitigation sites, to be finalized pursuant to habitat mitigation and monitoring plans (HMMPs) to be reviewed through subsequent NOID, CDP or federal consistency submittals, as applicable. As part of the NOID review process, the results of the consultations with persons and agencies interested in, with jurisdiction over, and/or affected by the proposed development, including consultations with federal and state resource agencies (e.g., Army Corps, USFWS, CDFG, RWQCB, etc.), as well as all supporting documentation are required to be submitted along with the NOID project report. Accordingly, all design and related project reporting would be submitted to the permitting agencies for consultation as part of the NOID review and approval process.

The REP includes a performance-based crediting and release system to ensure mitigation credits can be available for PWP/TREP project impact mitigation at incremental and measurable stages. The performance-based crediting and release system will ensure resource enhancement activities are advanced to the maximum extent possible, while achieving a balance of transportation and community enhancement projects in each phase. Under these procedures, mitigation credit will be released at the time the banking instrument (BEI) is signed with the conservation easement, with additional percentages of credits released after the grading and planting is complete (as-builts), and annual performance standards are achieved.

FIGURE 6-3: TREP, PWP/NOID, AND CDP COASTAL COMMISSION APPROVAL PROCESS



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The following credit release schedule is based on the California multi-agency BEI, template version dated April 16, 2012. According to the template, monitoring for performance standards for credit releases is for a minimum of five to ten years. Credits may be released as follows:

- **Release 1:** 15% of the total anticipated Waters of the U.S Credits upon the Bank Establishment Date.
- **Release 2:** Up to an additional 25% of the total anticipated Waters of the U.S Credits (40% cumulative total) when: i) the Bank Sponsor has submitted as-built drawings pursuant to Section VII.A.2, ii) the U.S. Army Corps of Engineers (USACE) has approved the as-built condition in writing, and iii) the Bank Sponsor has funded a minimum of 15% of the Endowment Fund per Section VI.E.2.a. Release 1 is a prerequisite for release 2.
- **Release 3:** Up to an additional 15% of the total anticipated Waters of the U.S Credits (55% cumulative total) when: i) the Bank Sponsor has submitted the Third Year Monitoring Report as required by the Development Plan, ii) Year 3 Performance Standards have been attained, and iii) the Bank Sponsor has funded a minimum of 40% of the Endowment Fund per Section VI.E.2.b. Release 2 is a prerequisite for release 3.
- **Release 4:** Up to an additional 15% of the total anticipated Waters of the U.S Credits (70% cumulative total) when: i) the Bank Sponsor has submitted the Fourth Year Monitoring Report as required by the Development Plan, ii) Year 4 Performance Standards have been attained, and, and iv) the Bank Sponsor has funded a minimum of 70% of the Endowment Fund per Section VI.E.2.c. Release 3 is a prerequisite for release 4.
- **Release 5:** Up to an additional 15% of the total anticipated Waters of the U.S Credits (85% cumulative total) when: i) the Bank Sponsor has submitted the Fifth Year Monitoring Report as required by the Development Plan, ii) Year 5 Performance Standards have been attained, iii) submittal of a Waters of the U.S. jurisdictional determination and delineation by the Bank Sponsor, and iv) the Bank Sponsor has funded 100% of the Endowment Fund per Section VI.E.2.d. Release 4 is a prerequisite for release 5.
- **Final Release:** Up to an additional 15% of Waters of the U.S Credits (100% cumulative total) when i) the Bank Sponsor has submitted the Final Monitoring Report as required by the Development Plan, ii) final Performance Standards have been attained, iii) any required Remedial Actions are completed, and iv) any additional performance standards required as a result of required Remedial Actions have been attained. Release 5 is a prerequisite for the final release.

Performance criteria will be established based on the specific goal and type of mitigation to be achieved, and will be further detailed based on reference sites in close proximity or adjacent to the mitigation parcel. Performance criteria will be further established in the associated HMMP, to be reviewed through subsequent NOID, CDP or federal consistency submittals, as applicable. Performance criteria that may be evaluated include, but are not limited to, hydrology indicators, native vegetation cover, species diversity, native seedling recruitment, control of non-native vegetation, soil stability (lack of erosion), and wildlife use of the area. Criteria will be established that provides a high level of confidence that, once performance criteria are achieved, the resultant vegetation communities will be resilient and persistent as a demonstration of self-sustainability under a long-term management program. Once the mitigation areas are established, comparative analysis of pre-and post-mitigation site conditions will demonstrate the anticipated improvements in biological resources and ecological function.

Criteria metrics and ecological standards for wetlands and uplands establishment will be developed in accordance with functional analysis methodologies to establish interim and final functional criteria. Interim target functional criteria scores will be used to inform maintenance decisions and regimes

during the five- to ten-year monitoring and maintenance periods to achieve the final target functional criteria scores.

Habitat Preservation/Enhancement. Temporary long-term (> 12 months) impact areas will be revegetated and returned to pre-existing conditions or better at a 1:1 ratio. Short-term temporary construction-related impact areas will be returned to pre-existing conditions. Mitigation credits for the temporal loss of habitat from long-term temporary impacts are based, in part, on acquisition of parcels containing existing high-value habitat areas within the Coastal Zone area and where permanent preservation of habitat is ensured. The credits will be finalized pursuant to final HMMPs to be reviewed through subsequent NOID, CDP or federal consistency submittals, as applicable, and the credits released for mitigation once the sites are deeded to an approved local land management agency that is acceptable to the resource agencies. Habitat preservation credits will mitigate for long-term temporary impacts resulting from PWP/TREP project impacts by ensuring long-term preservation of upland ESHA and/or wetland resources in advance of construction impacts occurring.

Lagoon Restoration. Additional mitigation credits available for no net loss compensatory mitigation for permanent and temporary wetland impacts are based on the number of acres potentially available for wetland establishment as part of the San Elijo and Buena Vista Lagoon Restoration projects. The credits available for wetlands, other waters, and riparian impacts will be finalized pursuant to a final restoration plan for San Elijo Lagoon and Buena Vista Lagoon, to be reviewed through subsequent CDPs and the federal consistency review process. These wetland mitigation credits will be released through the performance-based crediting and release system identified above to ensure mitigation credits can be available for PWP/TREP project impact mitigation at incremental and measurable stages.

In addition to establishing credits for compensatory mitigation for permanent and temporary wetland impacts, the REP projects will also facilitate and achieve ecological lift of corridor lagoon systems through the identified large-scale restoration plans. Therefore, the lagoon restoration projects included in the REP are considered appropriate for mitigating PWP/TREP project impacts. The ecological lift that will occur as a result of implementing one of these large-scale lagoon restoration plans will serve as mitigation for all PWP/TREP project impacts, including temporary long-term impacts, shading impacts, indirect and potential temporal wetland impacts.

Bridge Optimization (Achieving Hydraulic Lift in Lagoons). REP projects involving lagoon bridge lengthening through optimized designs will result in benefits to wetland resources, water quality, tidal range, flood control, groundwater recharge and recreation, which occur concurrent with bridge replacement projects. Lagoon optimization studies were completed for San Elijo, Batiquitos, and Buena Vista lagoons to inform the design of the I-5 and LOSSAN railroad bridges to optimize tidal flow, fluvial flow, and sediment transport. Optimized bridge lengths were also identified for Coast Highway and inlets within San Elijo and Buena Vista lagoons to maximize system benefits. The studies conclude that constructing longer and/or deeper channels and crossings at these lagoon locations will improve water quality, increase the quality of coastal wetland habitat, increase tidal range, decrease flood impacts, and improve the overall health and function of the lagoon systems. These REP projects are not subject to a specific credit calculation; however, because optimized bridge lengths have been identified as necessary for the success of proposed lagoon restoration projects at San Elijo and Buena Vista lagoons, and construction of identified optimized bridges is intended to specifically avoid and minimize impacts and enhance coastal resources and will result in a significant additional cost to the PWP/TREP program, they are a contributing enhancement element for all PWP/TREP project impacts. These REP

projects will offset water quality, shading, and eel grass impacts, and potential temporal impacts associated with areas impacted by temporary construction activities.

Lagoon Management/Endowments – Contingency Mitigation Credit. The resource agencies have indicated that an endowment for dredging to maintain the openings at the mouths of Batiquitos and Los Peñasquitos Lagoons is an important enhancement within the I-5 North Coast Corridor. Ten million dollars has been determined to be adequate to maintain these lagoon mouths in perpetuity if set aside in a non-wasting escrow account with a reasonable rate of return. Development of Long-Term Management Plans for use of the funds at Batiquitos and Los Peñasquitos Lagoons would identify specific tasks covered by the proposed endowment, and would support establishment of long-term goals to ensure appropriate triggers for when dredging activities would occur and funds would be released. A performance evaluation of the endowment would also occur at the end of the first phase of the NCC Program (i.e., first 10 years) to ensure adequate financial contingencies are in place to cover activities in perpetuity. The San Diego Foundation has presented information on their environmental endowment programs. They have a 20-year rate of return that exceeds 5%. Therefore, by placing $10 million in such an endowment, it would yield $500,000 annually over time.

Los Peñasquitos Lagoon has 25 years of maintenance dredging operation information and the numbers have remained relatively consistent with a cost of approximately $150,000 per year for the maximum project.

Batiquitos Lagoon has more varied costs for their maintenance over the last 15 years (see Table 6-9,). California Department of Fish and Game identified that the mobilization and demobilization were not included in the overall cost and that the 1998 and 1999 costs were anomalies. If those two years are removed, the average annual cost per year is $308,854. Of note, Batiquitos Lagoon also has a $5.5 million dollar endowment for maintenance which is not generating enough interest (1%) because of how the state invests the monies.

TABLE 6-9: COSTS FOR PREVIOUS DREDGING PROJECTS AT BATIQUITOS LAGOON

Cycle	Mobilizations	Disposal Locations	Volume (cy)	Cost-not including Mobilization/ Demobilization ($)	Mobilization/ Demobilization ($)	Total Cost ($)
98/99	1	South Ponto	10,562	98,187	75,000	173,187
99/00	1	South Ponto	4,268	21,910	75,000	96,910
00/01	2	South Ponto, W2	50,374	322,877	75,000	397,877
02/04	2	W1, E2 and E3	77,378	1,165,582	150,000	1,315,582
06/07	1	North and South Ponto	65,574	342,784	150,000	492,784
11/12	1	South Ponto	112,000	1,050,000	450,000	1,500,000
		Annual Average Cost	22,868	214,381	69,643	284,024
		Average Cost from 2000-2012	25,444	240,104	68,750	308,854

If we assume $350,000 annual cost for maintenance dredging for Batiquitos Lagoon and $150,000 annual cost for maintenance dredging of Los Peñasquitos Lagoon, there should be adequate funds, $500,000 annually for a non-wasting endowment.

SANDAG proposes to work with a qualified entity on the payments amounts and timing to establish an endowment that will generate on average $500,000 a year. The endowment will be non-wasting and only the interest will be available for use. A oversight committee, comprised of SANDAG, Caltrans, Coastal Conservancy, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers and the California Department of Fish and Wildlife [maybe others], will be established to meet annually to discuss the interest generated over the year and the distribution of any funds from the interest.

Mitigation credits will be established by contributing funding through the PWP/TREP Phasing Plan process to endow a regional lagoon maintenance and management program. This REP project funding would be put into an account and managed for lagoon maintenance and management activities, as deemed necessary, including maintenance dredging, weed eradication and control, etc. The amount of endowment is based on maintenance costs to date and a reasonable calculated rate of interest on the account that would provide for maintenance funds in perpetuity. Based on the cost of $10 million dollars, it is anticipated that the endowment funds would need to accrue interest for approximately 5 years prior to use of funds. The endowment would be managed by the REP Working Group, an oversight committee to be formed of resource agency personnel. Caltrans and SANDAG find that the establishment of this endowment should be granted enhancement credit to offset impacts for the I-5 NCC Project and LOSSAN projects. The following is an estimation of potential credits for maintenance of the lagoon mouths as determined similar to the 35 acres allotted to the SONGs mitigation for maintenance of the San Dieguito Lagoon mouth.

Batiquitos Lagoon comprises approximately 591 acres of coastal wetlands, with approximately 100 acres in the central basin, 300 acres in the eastern basin and the remainder (191 acres) in the western basin. Based on modeling of tidal ranges of the shoaled versus dredged condition in each basin there will be an increase in tidal range between 1 and 9 percent. When the percent increase in tidal range in each basin is multiplied by the acreage in each basin, then there is a change of 2.4 acres in the western basin, 5.9 acres in the central basin, and 27.4 acres in the western basin. The total percent change is equal to 35.2 acres. SANDAG/Caltrans propose that funding an endowment for lagoon mouth maintenance at Batiquitos Lagoon should qualify for credit, or it should be agreed that it will serve as contingency credits for any deficits of credit release between beginning construction of the wetland mitigation sites and impacts from the LOSSAN and I-5 NCC projects, as necessary.

	Tidal range					
Basin	Acreage	Existing Shoaled (ft)	Existing Dredged (ft)	Difference (ft)	Percent Change	Total * Acres
West Basin (WB2)	191	7.15	7.24	0.09	1.3%	1.9
Central Basin (CB2)	100	6.8	7.23	0.43	6.3%	5.9
East Basin (EB1)	300	6.47	7.12	0.65	10.0%	27.4

* Acreage X Percent Change = Percent Change in Acres

Los Peñasquitos Lagoon is located along the northwest border of the City of San Diego, just south of the City of Del Mar. The lagoon is located in the Los Peñasquitos watershed, which encompasses

approximately 95 square miles. Carmel Creek and Los Peñasquitos Creek are the main tributaries to the lagoon. There are approximately 463 acres of tidal wetlands within the lagoon and it extends inland approximately 2.04 miles.

One of the major issues facing the lagoon is the rate of increased sedimentation from the alteration of the existing tidal prism (with the construction of the railroad bridge) and the urbanization of the watershed. Additionally, due to the increase in freshwater runoff from landscaping, wastewater treatment and hardpan (cement lining), far more freshwater enters the lagoon year-round then it did historically. Because of these issues, the lagoon mouth began to close seasonally. This reduces the health of an estuary by limiting the amount of sediment it can remove from the system and causes significant changes in salinity levels. Evaporation reduces the amount of water within the closed lagoon and increases the concentration of salt, which can rise to lethal levels for many of the organisms that live within the water and mudflats of the lagoon, and thereby impact the entire area's food web. In an effort to mitigate for this, the Los Peñasquitos Lagoon Enhancement Plan was developed in 1985 by the Coastal Commission. Adaptive management included monitoring of the lagoon water quality and of the mechanical opening of the mouth of the lagoon before water quality became poor enough to kill organisms (PERL 2004).

Additional efforts to help maintain the opening of the mouth of the lagoon were implemented during construction of the Highway 101 bridge, which spans the mouth of the lagoon. The bridge, which was completed in 2005, was designed to reduce its impact on the tidal prism (Flatiron 2009). The structure now includes only four bridge supports, all of which are located outside the tidal channel.

Future restoration activity for the Los Peñasquitos Lagoon has focused on the reduction of sediment to the system, curtailing freshwater input, and maintaining the opening of the lagoon mouth. Therefore, maintenance of the Los Peñasquitos Lagoon mouth has been identified as a need for using enhancement funds in the I-5 North Coast Corridor. There is no modeling data for Los Peñasquitos Lagoon; however, since the mouth closes completely, the tidal range is eliminated at certain times of the year. If we assume a 1% benefit to the tidal wetlands of the lagoon that would result in 4.6 acres of credit.

It is generally agreed that maintenance of the mouths of both of these lagoons is important for their functioning and overall health. Quantifying the benefits of the maintenance is a difficult thing to do. However, with some lag time between the sign-off on all wetland mitigation sites and some first phase impacts to the lagoons, Caltrans and SANDAG find that establishing the $10 million dollar endowment should either be granted up to 39.8 acres of credit, or it should be agreed to that it will serve as contingency credits for any deficits of credit release between beginning construction of the wetland mitigation sites and impacts from the LOSSAN and I-5 NCC projects, as necessary. SANDAG and Caltrans also propose that 10 percent of this mitigation credit (3.92 acres) would be available upon establishment of the endowment and the funding strategy. The balance of the available credits would be available when the interest of the endowment exceeds $500,000.

6.2.2.8 Resource Enhancement Program Project Mitigation and Phasing

Advanced Coastal Resource Enhancement Activities Mitigation and Phasing

Advanced resource enhancement activities are assigned specific no net loss mitigation credits based on the type of habitat established and/or restored resulting from individual REP projects, and/or for endowment of maintenance activities that sustain lagoon functions and values. Once established, mitigation credits are available to mitigate any PWP/TREP transportation and/or community

enhancement project impacts included in an active phase of the PWP/TREP Phasing Plan (i.e., 2010-2020; 2021-2030; 2031-2040; or 2041-2050). Where habitat mitigation credit exceeds the cumulative project impacts of any particular project phase, habitat mitigation credit is made available to mitigate impacts associated with project implementation of the following phases.

Advanced resource enhancement activities also include projects which provide enhancement and/or preservation of sensitive coastal resources, and facilitate and achieve ecological lift of corridor lagoon systems, specifically large-scale restoration plans for San Elijo Lagoon and Buena Vista Lagoon, and hydraulic lift associated with bridge optimization projects for San Elijo Lagoon, Batiquitos Lagoon and Buena Vista Lagoon. The San Elijo and Buena Vista Lagoon Restoration Plans will potentially establish a specific amount of wetland mitigation credits; however, REP projects that facilitate and achieve ecological/hydraulic lift of corridor lagoon systems through large-scale restoration plans and/or bridge optimization are generally not subject to a specific credit calculation but nevertheless will result in significant enhancement of corridor resources through the REP implementation process and are considered appropriate for mitigating PWP/TREP project impacts.

Mitigation Site Assessments

Mitigation Site Assessments are required for all REP mitigation and enhancement projects to be implemented to establish mitigation credits based on the type of habitat establishment, restoration, enhancement and/or preservation proposed. These REP projects demonstrate a strong nexus for meeting the ecological needs in the NCC while respecting the phasing requirements for transportation-project development identified in the PWP/TREP, as described within Table 2, and will be fully funded and implemented upon PWP/TREP approval. Mitigation Site Assessments for the current package of REP projects are included in Appendix A.

Mitigation Site Assessments serve to formalize how the habitat establishment, restoration, enhancement and/or preservation activities proposed for each of the sites conform to the REP goals and criteria enumerated above. Mitigation Site Assessments also provide preliminary information to confirm mitigation credits to be established for each project and to assist in the preparation of final implementation plans that will be subject to further review through subsequent NOID, CDP or federal consistency submittals, as applicable. Mitigation Site Assessments are to include the following preliminary information, as applicable:

- Overall Mitigation Goal
- Mitigation Goals/Credits
- Existing Conditions
  - Ecological Context
  - Drainage and Hydrology
  - Soils
  - Vegetation (Including Existing Vegetation Map)
  - Wildlife
  - Prior and Current Land Use
  - Existing Utilities/Infrastructure/Easements
- Mitigation Program
  - Schedule
  - Mitigation Goal and Purpose Summary

  - Hydrology
  - Topographic Modification
  - Soils
  - Target Plant Communities
  - Supportive Measures
  - Performance Criteria
- Site Protection
- Long-term Management
- Additional Studies Required
- Required Permits

PWP/TREP Resource Enhancement Program Phasing

The REP is an integral component of the PWP/TREP Phasing Plan, in which the region, stakeholders and resource agencies can track the progress and success of the PWP/ TREP program. The Phasing Plan reflects the region's priorities relative to identifying resource enhancement opportunities and implementing REP projects that address the most significant natural resource needs of the NCC, while respecting the phasing requirements for transportation-project development identified in the PWP/TREP. Consistent with Senate Bill 468 (Kehoe), the REP and PWP/TREP Phasing Plan collectively provide the framework for the region to allocate *TransNet* EMP funds for regional habitat acquisition, management, and monitoring activities based on the estimated economic benefits derived from permitting and approval efficiencies accomplished through the NCC PWP/TREP process, with funding to be released by SANDAG in phases based on the proportion of PWP/TREP projects that have been issued NOIDs, CDPs and/or federal consistency reviews, as applicable.

The PWP/TREP Implementation Plan includes specific measures to ensure that REP projects will be implemented prior to, or concurrent with, PWP/TREP transportation and community enhancement projects according to the approved phasing plan. NOID submittals for transportation and community enhancement projects provide the primary mechanism to continuously ensure adequate mitigation is provided for PWP/TREP project impacts. This chapter requires NOID submittals to provide the following project details (among others) before a NOID will be filed and reviewed by the Coastal Commission for consistency with the approved PWP/TREP:

1. The expected date of commencement of construction.
2. A description of the proposed development that is: sufficient to understand its size, location, type, and intensity (including but not limited to site plans, grading plans, and elevations/renderings showing the proposed development, where applicable) sufficient to determine the development is contained in the PWP/TREP.
3. A discussion of the proposed development consistency with the Preliminary Phasing Plan detailed in Section 6.2.1 including details regarding:
   A. The project phase in which the development is included
   B. The status of implementation of other rail, highway, community and resource enhancement projects included in the same phase
   C. A brief summary of the proposed development's contribution to the mobility and resource benefits of the project phase

D. Description of any project-specific resource impacts and status of corresponding mitigation requirements for the project phase.

E. A detailed discussion and justification for any proposed project shift between project phases as provided in the Phasing Plan.

4. Environmental documentation for the proposed development prepared pursuant to California Environmental Quality Act (CEQA) and/or NEPA.
5. All technical reports associated with the proposed development (such as biological reports, geotechnical reports, traffic analyses, etc.), including all reports, studies, and/or project-specific plans required pursuant to applicable Chapter 5 implementation measures.
6. The results, including supporting documentation, of consultation with persons and agencies interested in, with jurisdiction over, and/or affected by the proposed development, including consultations with federal and state resource agencies (such as the United States Fish and Wildlife Service, California Department of Fish and Game, Regional Water Quality Control Board, etc.)
7. All implementing mechanisms associated with the proposed development including, but not limited to, Cooperative Maintenance agreements with affected cities for community enhancement projects, CEQA mitigation monitoring reports, legal documents, lease agreements, etc.

Resource Enhancement Program Project Maintenance and Monitoring

As identified in the Mitigation Site Assessments, monitoring requirements for each REP mitigation project will be conducted according to final Habitat Management Plans (HMP) and/or restoration plans. In addition, the PWP/TREP Implementation Plan includes a monitoring and reporting program which will provide a yearly assessment and summary of information and updates to the Implementation Framework to document projects and associated mitigation requirements completed, and to assess cumulative phase project impacts, benefits and available resource mitigation credits for future project and/or phase implementation.

Mitigation Site Assessments identify anticipated maintenance activities that will be necessary for individual mitigation projects, and an HMP will be prepared to further define the long-term management responsibilities to maintain the coastal resources that are established through the REP mitigation projects. Each HMP will identify a resource agency-approved management entity to assume long-term management responsibilities. Funds for long-term management will be provided by SANDAG/Caltrans and placed into a non-wasting endowment. Endowment funds will be established using a Property Assessment Report that is based on the approved HMP.

Supplementing REP Opportunities – Mitigation Contingencies and Future Opportunities

Should a circumstance arise where a NOID report or yearly monitoring report determine unanticipated resource impacts have occurred from project construction, or are greater than project construction impacts approved for any particular project phase identified in the PWP/TREP, or a previously identified mitigation opportunity is no longer feasible or available, SANDAG/Caltrans will be responsible for initiating additional projects through the REP Working Group. The REP Working Group would initiate new projects in accordance with: 1) the applicable NOID and/or PWP amendment procedures outlined in Chapter 6 of the PWP/TREP, 2) the CDP review process, or 3) the Federal Consistency Certification process, to sufficiently balance program impacts and benefits prior to initiating transportation and community enhancement projects contained in a subsequent phase. These procedures may also be initiated should SANDAG/Caltrans, in consultation with stakeholders and resource agencies, determine that a new resource enhancement opportunity has been identified that

meets the category and evaluation criteria identified in the REP, funds are available, and therefore warrants incorporation into the REP and prioritization within the PWP/TREP Phasing Plan.

6.3 INTERPRETATION AND USE OF THE PWP

As detailed in Chapter 1 of the PWP/TREP and Section 6.1, the LOSSAN rail projects included in the PWP/TREP which improve the movement of freight fall under the exclusive jurisdiction of STB and are, therefore, not subject to CDP or public works plan requirements. The standard of review for these rail projects will continue to be the Chapter 3 policies of the Coastal Act as applied during the federal consistency review process (Section 6.4), rather than consistency with the PWP/TREP.

The Federal Consistency Certification provisions described in Section 6.4 below apply only to the LOSSAN rail projects that do not require approval under the PWP or individual CDPs, except as may otherwise be applicable for potential future PWP amendments to approved highway and associated community enhancement projects (as specified in Section 6.4.2.5). For the highway, community and resource enhancement improvements subject to both federal consistency and PWP requirements, the PWP/TREP provides a coordinated document to obtain Federal Consistency Certification for these improvements, which will receive a permit from the Coastal Commission pursuant to the PWP review procedures described in Section 6.5 and, therefore, do not require a separate consistency certification. These PWP/TREP improvements shall be found consistent with the scope of improvements contained in Chapter 4 of the PWP/TREP and all policies and implementation measures contained in Chapters 5 and 6, and shall be subject to the PWP Development Review Procedures described in Section 6.5 and/or the CDP review procedures described in Section 6.6.

Table 6-10 lists the proposed PWP/TREP transportation improvements by project phase and identifies those projects subject to federal consistency review and/or PWP requirements or, as it applies to rail improvements which do not fall under the exclusive jurisdiction of STB, potential CDP requirements. Furthermore, PWP/TREP community and resource enhancement improvements would be subject to PWP requirements, with the exception of large-scale lagoon restoration plans, which would require separate CDPs.

TABLE 6-10: PROJECT-SPECIFIC FEDERAL CONSISTENCY REVIEW AND/OR PWP OR CDP PROCEDURE REQUIREMENTS (PRELIMINARY PHASING PLAN)

Phase	Transportation Improvements	Federal Consistency (FC) and/or PWP or CDP Requirement[5]
Initial-Term	I-5 HIGHWAY	
	2 HOV from Lomas Santa Fe to Union St, including San Elijo Bridge Replacement, Manchester DAR, bike paths/trails and ultimate grading (Phase 1A)	FC/PWP
	1 HOV from Union St to SR 78 (Phase 1B)	FC/PWP
	2 HOV from La Jolla Village Dr to I-5 /I-805 merge, includes Voigt DAR & I-5/I-805 HOV Flyover Connector (Phase 1C)	FC/PWP
	LOSSAN	
	CP Eastbrook to CP Shell Double-Track	FC
	Oceanside Through Track	FC
	Carlsbad Village Double-Track, includes Buena Vista Bridge Replacement	FC
	CP Ponto to CP Moonlight Double-Track, includes Batiquitos Bridge Replacement	FC
	Encinitas Station Parking	FC/PWP or CDP
	CP Cardiff to CP Craven Double-Track, includes San Elijo Lagoon Double-Track	FC
	Solana Beach Station Parking	FC/PWP or CDP
	San Dieguito Bridge/Double-Track, includes San Dieguito Lagoon Bridge Replacement	FC
	Poinsettia Station Improvements	FC
Mid-Term	I-5 HIGHWAY	
	2 EL from I-5/I-805 to SR 56, including new Sorrento Valley Road bike/ maintenance vehicle bridge, trails under I-5 at Carmel Creek, widening of I-5 at Carmel Creek, and trail under merge (Phase 2A)	FC/PWP
	2 EL from SR 56 to Lomas Santa Fe Dr, including San Dieguito River Bridge Widening and bike paths/trails (Phase 2B)	FC/PWP
	2 EL from Union St to Palomar Airport Rd, including Batiquitos Lagoon Bridge Replacement (Phase 2C; if not advanced)	FC/PWP
	LOSSAN	
	Oceanside Station Parking	FC/PWP or CDP
	Carlsbad Village Station Parking	FC/PWP or CDP
	Carlsbad Poinsettia Station Parking	FC/PWP or CDP
	CP Moonlight to CP Swami Double-Track	FC
	Del Mar Fairgrounds Platform	FC/PWP or CDP
Long-Term	I-5 HIGHWAY	
	2-4 EL from Palomar Airport Rd to SR 76, including Agua Hedionda & Buena Vista Lagoon Bridge Replacements (Phase 3A-3C)	FC/PWP
	Construct Braided Ramps from Roselle to Genesee (Phase 3D)	FC/PWP
Vision	I-5 HIGHWAY	
	I-5/SR-78 Improvements	FC/PWP
	LOSSAN	
	Leucadia Blvd Grade Separation	FC
	Del Mar Tunnel – Camino Del Mar / Peñasquitos Double-Track Option – I-5 / Peñasquitos Option	FC
	Peñasquitos Double-Track	FC

[5] The PWP itself serves as Coastal Commission concurrence with the consistency certification for the non-rail projects that are being approved under the PWP. Therefore, projects listed as requiring both a federal consistency certification and a PWP will not go through a separate consistency certification process.

6.4 FEDERAL CONSISTENCY REVIEW PROCEDURES

Given the PWP/TREP program-level of detail available to evaluate potential coastal resource impacts from rail improvement projects, it is anticipated federal consistency review may need to be conducted in a phased manner for proposed rail improvements. As rail projects are further developed, additional federal consistency review would be conducted, as necessary, for the proposed PWP/TREP rail improvements that require federal permits, federal authorization, and/or federal funding. The standard of review in these cases would be the Coastal Act, with the affected LCP(s) and the PWP/TREP providing guiding policy and/or background information. In addition, Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), Federal Transit Administration (FTA), U.S. Army Corp of Engineers (USACE) and other federal agency procedures require the Coastal Commission's concurrence with consistency certification prior to finalizing any Environmental Impact Statement (EIS) and issuance of a Record of Decision (ROD) for proposed PWP/TREP projects.

Furthermore, should modifications to highway, community and resource enhancement project design and/or changes within the project area create the potential for resource impacts not considered during federal consistency review for the PWP/TREP, additional federal consistency review may be required. In such instances, the PWP/TREP may be amended pursuant to Section 6.7 of this chapter, and may potentially require phased or re-opening of the federal consistency review process.

6.4.1 Federal Consistency Certification Submittal Contents

A Federal Consistency Certification submittal to the Commission for any individual PWP/TREP project, or package of projects, shall be clearly titled as such and shall, at a minimum, include the following information regarding the proposed development project or activity:

1. The project description and location, and identification and availability of associated NEPA/CEQA documents, including relevant studies, reports, and technical materials included as part of, or supporting, the project environmental review and consistency certification.
2. Copy/ies of any applicable federal permit application/s and relevant material provided to the federal agency in support of the application/s and which is relevant to the Federal Consistency Certification.
3. A detailed description of the proposed project or activity, its associated facilities, the coastal effects, and any relevant project plans, mapping, data, technical studies, or other information sufficient to support the consistency certification.
4. A detailed consistency certification (an evaluation that includes a set of findings relating to the coastal effects of the proposed project or activity with applicable Chapter 3 policies of the Coastal Act), which includes a statement that, "*The proposed activity complies with California's approved Coastal Zone Management Program and will be conducted in a manner consistent with such program*."
5. Where the consistency certification is contained in associated project NEPA/CEQA documentation, a cover letter identifying that the NEPA/CEQA document contains the analysis and where the analysis is included in the NEPA/CEQA document.

6.4.2 Commission Review of Federal Consistency Certification

Where applicable, SANDAG/Caltrans will arrange a meeting with the Executive Director of the Commission prior to submittal of a Federal Consistency Certification to allow time for pre-consultation on the proposed development or activity. SANDAG/Caltrans will notify the Executive Director of the

Commission a minimum of 90-days prior to final approval of a federal action (i.e., a ROD or Finding of No Significant Impact).

Upon formal submittal of a Federal Consistency Certification to the Executive Director, the Commission shall review the Federal Consistency Certification in accordance with the procedures set forth in Sections 6.4.2.1–6.4.2.5.

6.4.2.1 Commission Acceptance/Process of Consistency Certification Waiver Request

1. Should SANDAG/Caltrans, or other project Lead Agency, determine a particular project activity is de minimis and would not affect coastal resources, and Commission confirmation is required, the agency/ies may request a waiver of the consistency certification requirement.
2. A consistency certification waiver request must contain a brief description of the proposed development or activity, the project or activity location, and the basis for the request, including an analysis of the proposed project or activity with applicable Chapter 3 policies, sufficient for the Commission to evaluate whether the project or activity would affect coastal resources.
3. Within 30 days of receipt of consistency certification waiver request and all applicable supporting information for a proposed development project, the Executive Director of the Commission shall review the submittal and notify SANDAG/Caltrans or other project Lead Agency that:
4. The subject consistency certification is waived
5. Additional information is necessary to adequately review the consistency certification waiver request, and if additional information is deemed necessary, shall request such information from SANDAG/Caltrans or other project Lead Agency, or
6. The subject consistency certification is not waived and a consistency certification for the proposed project or activity must be submitted for review by the Commission.

6.4.2.2 Commission Acceptance/Processing of Consistency Certification

Within 30 days of receipt of the Federal Consistency Certification and all applicable supporting information for a proposed project or activity as described in Section 6.4.1, the Executive Director of the Commission shall review the submittal and notify SANDAG/Caltrans or other project Lead Agency that additional information is necessary to adequately review the consistency certification, and if additional information is deemed necessary, shall request such information from SANDAG/Caltrans or other project Lead Agency and the federal permitting agency, or shall notify SANDAG/Caltrans or other project Lead Agency that the submittal is deemed complete and accepted processing.

1. The consistency certification will be deemed complete if the Executive Director does not respond within 30 days to the consistency certification submittal or to a submittal with additional information made in response to the Executive Director's request for such information.
2. The consistency certification will be deemed complete upon receipt and review of the Executive Director, within 30 days, of any additional information submitted in response to the Executive Director's request for such information.
3. Once deemed complete, a staff report will be prepared and public notice provided for Commission action on the consistency certification within six months.
    i. If the Commission has not issued a decision on the consistency certification within three months of the date the consistency certification was deemed complete, the Commission will notify SANDAG/Caltrans or other project Lead Agency and the federal permitting agency of the status of the matter and the basis for any further delay.

ii. Commission concurrence with the consistency certification within six months of the date the consistency certification was deemed complete can be conclusively presumed if the Commission does not act within six months of the date the consistency certification was deemed complete. The Commission's hearing deadline may be extended if, on or before the hearing deadline, SANDAG/Caltrans, or other project Lead Agency and the federal permitting agency, and the Commission agree to an extension of the hearing deadline to allow Commission review to occur at a later hearing. An extension of the Commission's hearing deadline shall be for no more than six months from the original hearing deadline as established by the date the consistency certification was deemed complete.

4. The Commission will hold a public hearing and may take action to concur, conditionally concur with, or object to the consistency certification as described in Sections 6.4.2.3 and 6.4.2.4.

6.4.2.3 Commission Concurrence with Consistency Certification

1. The Commission will hold a public hearing and may concur with the consistency certification, based on the project or activity's consistency with Chapter 3 policies of the Coastal Act.
2. The Commission may conditionally concur with a consistency certification. Such conditions must be based on the project or activity's consistency with Chapter 3 policies of the Coastal Act. Should SANDAG/Caltrans, or other project Lead Agency or the federal permitting agency, not agree with the conditions and/or does not modify the project or activity to incorporate the conditions, the Commission's conditional concurrence will be treated as an objection.
3. Conditional concurrences for federal license or permit and federal assistance activities are appealable to the Secretary of Commerce.

6.4.2.4 Commission Objection to Consistency Certification

1. The Commission may object to a consistency certification by finding the information supplied is insufficient to enable the Commission to assess the activity for consistency with the Chapter 3 policies of the Coastal Act, in which case the Commission will identify the information and the reason it is necessary to assess consistency of the project or activity's consistency with applicable Chapter 3 policies of the Coastal Act.
2. The Commission may object to a consistency certification by finding the proposed project or activity is inconsistent with the Chapter 3 policies of the Coastal Act, in which case the Commission will identify alternative measures, where such measures exist, that would cause the Commission to concur with the consistency certification.
3. A Commission objection to a consistency certification may be appealed to the Secretary of Commerce within 30 days from receipt of the objection.

6.4.2.5 Consolidated Review of Consistency Certification and PWP Amendment

Wherever possible and as requested by SANDAG/Caltrans or other project Lead Agency, the Executive Director of the Commission should recommend to the Commission consolidated review of any consistency certification and associated application for a PWP Amendment and/or CDP where required for rail, highway, transit, community or resource enhancement projects included in the PWP/TREP.

6.5 PWP DEVELOPMENT REVIEW PROCEDURES

All PWP/TREP improvements subject to PWP requirements shall be subject to the PWP Development Review Procedures described in this section. The following procedures and standards are applicable to all transportation, community, and resource enhancement improvements permitted in the PWP/TREP and subject to PWP requirements, except as provided for in Section 6.5.6, Development Excluded from Project-Specific NOID procedures. In addition, PWP/TREP rail improvements subject only to the federal consistency review procedures detailed in Section 6.4, and those improvements located in areas of the Coastal Commission's permit jurisdiction and therefore subject to the CDP review procedures detailed in Section 6.6, are not required to obtain a NOID prior to construction.

After the PWP/TREP has been approved by the Coastal Commission, any development proposed pursuant to the approved plan would be processed as a Specific Project. The NOID process for implementation of specific PWP projects is outlined in Figure 6-4.

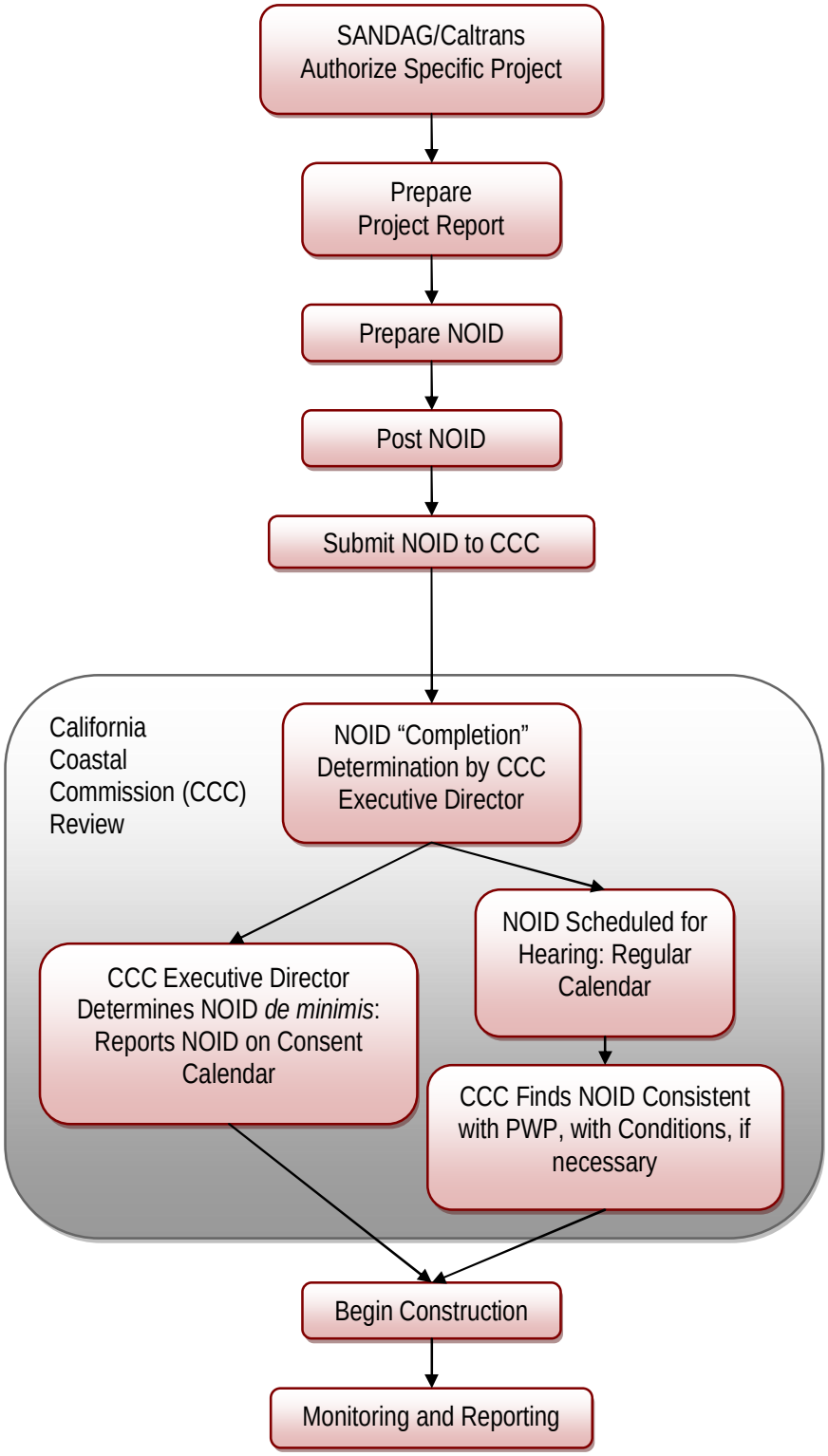
6.5.1 Development Consistency

Development shall be deemed consistent with the PWP/TREP if it is found consistent with the following provisions of the PWP/TREP:

1. The development is consistent with the scope of planned improvements detailed in Chapter 4.
2. The development is consistent with the resource-specific policy and implementation measures included in Chapter 5.
3. The development is consistent with the phasing and implementation requirements contained in Section 6.2.

Figure 4-5 and Table 6-1 (Implementation Framework), identify the type, location, and size of development permitted by this PWP/TREP. Development shall not be authorized unless it is of a type, location, and size contemplated by Chapter 4, and it is demonstrated project implementation is in compliance with all policies and implementation measures of Chapters 5 and 6 of the PWP/TREP, as applicable.

FIGURE 6-4: NOTICE OF IMPENDING DEVELOPMENT (NOID) PROCESS



6.5.2 NOID Contents

A NOID for any individual transportation, community or resource enhancement project shall be clearly titled as such, shall be submitted to the Executive Director of the Commission at least 30 working days before the beginning of construction, and shall, at a minimum, include the following information regarding the development project authorization:

1. The project description and location, including identification and availability of a project report (prepared pursuant to Section 6.5.3) and information regarding where and when it is available for public review. Copies of associated lengthy and/or oversized studies, reports, and technical materials included as part of the project report shall be provided to the Executive Director, and to interested persons and agencies which specifically request these materials.
2. The expected date of commencement of construction;
3. The appropriate Caltrans and/or SANDAG contact person(s) and/or designated project manager and their contact information;
4. A list of recipients of the NOID.
5. Supporting information sufficient to allow the Executive Director to determine whether the proposed development project is consistent with the certified PWP/TREP shall accompany the NOID submitted to the Executive Director, and to persons and agencies requesting such information. At a minimum, the supporting information shall include:
   A. Any final authorization documents from SANDAG/Caltrans (e.g., approval, resolutions, certifications, etc.) not included in the project report
   B. A separate document that identifies all applicable project conditions, mitigations and implementation measures for the proposed development project
   C. Copies of all correspondence received on the proposed development project; and
   D. For the Executive Director only:
      i. A mailing list with names and addresses for each of the persons and/or agencies provided with the NOID;
      ii. One set of plain (i.e., unadorned with no return address) regular business size (9-inch by 4-inch) envelopes stamped with first class postage (metered postage is not acceptable) addressed to all interested persons and agencies, for each Commission hearing on the matter (i.e., if there are multiple Commission hearings on the matter, then multiple envelop sets shall be provided as directed by the Executive Director); and,
   E. Evidence that the NOID has been posted pursuant to the parameters of Section 6.5.4 (evidence might include a site plan with the notice locations noted and/or photos of the notice locations attached).

6.5.3 Preparation of Project Reports

Except as provided in Sections 6.5.6 and 6.7, SANDAG/Caltrans shall prepare a project report to accompany the NOID submittal for each development project included in the PWP/TREP and subject to PWP requirements. The project report shall include any information deemed necessary by SANDAG/Caltrans to satisfy the standards for development authorization set forth in this PWP/TREP. At a minimum, the project report shall include:

1. A description of the proposed development that is: sufficient to understand its size, location, type, and intensity (including but not limited to site plans, grading plans, and elevations/renderings

showing the proposed development, where applicable) sufficient to determine the development is contained in the PWP/TREP.

2. A consistency analysis of the proposed development with all applicable Chapter 5 policies and implementation measures.
3. A discussion of the proposed development consistency with the Preliminary Phasing Plan detailed in Section 6.2.1 including details regarding:
   A. The project phase in which the development is included
   B. The status of implementation of other rail, highway, community and resource enhancement projects included in the same phase
   C. A brief summary of the proposed development's contribution to the mobility and resource benefits of the project phase
   D. Description of any project-specific resource impacts and status of corresponding mitigation requirements for the project phase.
   E. A detailed discussion and justification for any proposed project shift between project phases as provided in the Preliminary Phasing Plan (Table 6-1).
4. Environmental documentation for the proposed development prepared pursuant to CEQA and/or NEPA.
5. All technical reports associated with the proposed development (such as biological reports, geotechnical reports, traffic analyses, etc.), including all reports, studies, and/or project-specific plans required pursuant to applicable Chapter 5 implementation measures.
6. The results, including supporting documentation, of consultation with persons and agencies interested in, with jurisdiction over, and/or affected by the proposed development, including consultations with local, federal and state resource agencies (such as the United States Fish and Wildlife Service, California Department of Fish and Wildlife, Regional Water Quality Control Board, etc.)
7. All implementing mechanisms associated with the proposed development including, but not limited to, Cooperative Maintenance agreements with affected cities for community enhancement projects as detailed in Section 5.7 of Chapter 5, CEQA mitigation monitoring reports, legal documents, lease agreements, etc.
8. All correspondence received on the proposed development
9. Identification of a person (project manager, Resident Engineer) responsible for ensuring the proposed development is constructed to authorized specifications, that all terms and conditions of approval are met, and that any budget shortfalls which could affect these commitments are identified and brought to the attention of decision-makers; and
10. Findings:
    A. The proposed development has been reviewed in compliance with the CEQA and/or NEPA, and all conditions and/or mitigation measures identified in those CEQA and/or NEPA documents have been incorporated as part of the proposed development;
    B. The proposed development project advances the purpose of this PWP/TREP, as set forth in Chapter 3;
    C. The proposed development has been reviewed by any affected local jurisdiction, resource and/or lagoon conservancy, and comments have been reviewed and considered.

D. The proposed development, as modified by any conditions and/or mitigation measures incorporated as part of the project, is contained in and is consistent with the certified PWP/TREP.

6.5.4 NOID Posting Requirements

The NOID shall be posted in conspicuous locations at the proposed development site when the NOID is submitted pursuant to the procedures set forth in this section, and at least 30 working days before beginning of construction. The notices shall be subject to the following parameters:

1. Posted notices shall be sized and located in an area easily read by the public and as close to the proposed development site as is feasible.
2. Notices shall indicate that a NOID has been submitted to the Commission for proposed development and shall contain a general description of the nature of the proposed development.
3. Notices that may become illegible, and/or that fall to the ground or disappear must be replaced, and shall remain posted until the effective date of development authorization.

6.5.5 Commission Review of NOID

Where feasible, SANDAG/Caltrans will arrange a meeting with the Executive Director of the Commission prior to submittal of a project-specific NOID to allow time for pre-consultation on the proposed development.

Upon submittal of a NOID to the Commission, the Executive Director shall review the proposed development project/s contained in the NOID for consistency with the PWP/TREP in accordance with the procedures of this section.

6.5.5.1 Filing the NOID

Within 5 working days of receipt of the NOID and all applicable supporting information for a proposed development project (as described in Sections 6.5.2 and 6.5.3), the Executive Director shall review the submittal and shall determine whether the NOID is “complete”, or whether additional information is necessary to determine if the proposed development project is consistent with the PWP/TREP, and if additional information is deemed necessary, shall request such information from the project manager. The NOID shall be deemed filed as follows:

1. The NOID shall be deemed “complete” if the Executive Director does not respond to the NOID or any subsequent information submittal within 5 working days following its receipt; the NOID shall be deemed “complete” on the 5th working day following the Executive Director’s receipt of the NOID or to a submittal with additional information made in response to the Executive Director’s request for such information.
2. The NOID shall be deemed “complete” when all necessary information requested for purposes of reviewing the proposed project’s consistency with the PWP/TREP has been received by the Executive Director. In the event of disagreement concerning the need for additional information or the adequacy of information submitted to enable the Commission to analyze project consistency with the certified PWP/TREP, SANDAG/Caltrans may appeal the Executive Director’s determination that additional information is needed to the Commission for resolution. The Executive Director shall schedule the matter for hearing and resolution at the next Commission meeting or as soon thereafter as practicable, but no later than 60 calendar days after the Executive Director’s receipt of written appeal by SANDAG/Caltrans expressing disagreement with the Executive

Director's determination that additional information is needed to analyze project consistency with the certified PWP/TREP. The appeal shall be scheduled and heard by the Commission in accordance with the procedures set forth in California Code of Regulations, Title 14 Section 13056(d). The Executive Director shall notify SANDAG/Caltrans, no later than 60 calendar days after the Executive Director's receipt of written appeal by SANDAG/Caltrans, of any change in the Executive Director's determination that additional information is necessary to analyze project consistency with the certified PWP/TREP as directed by the Commission.

6.5.5.2 Commission Hearing Deadline

The Commission shall hold a hearing on the NOID no later than thirty 30 (thirty) working days following the day the NOID is deemed "complete". If the Commission fails to act upon the NOID on or before the hearing deadline, the noticed development project shall be deemed consistent with the certified PWP/TREP. The hearing deadline may be extended if, on or before the hearing deadline, SANDAG/Caltrans waive the right to a hearing within 30 working days to allow Commission review to occur at a later hearing, and agrees to an extension to a date certain. An extension of the Commission's hearing deadline shall be for no more than three months from the original hearing deadline as established by the date the NOID was deemed complete.

6.5.5.3 Commission Review and Determination of Consistency with PWP/TREP

1. The Executive Director shall report, in writing to the Commission, the pendency of the proposed development project for which a NOID has been deemed complete. The Commission shall review the proposed development project at a scheduled public hearing prior to the hearing deadline.
2. If the Executive Director determines one or more proposed development projects are *de minimis* with respect to the purposes and provisions of the PWP/TREP, they may be scheduled for the Commission's review at one public hearing, during which all such items may be taken up as a single matter pursuant to procedures comparable to the Commission's consent calendar procedures (California Code Regulations, Title 14, Sections 13101 through 13103).
3. For all other proposed development projects, the Executive Director's report to the Commission shall include a description sufficient to allow the Commission to understand the location, nature, and extent of the proposed development, and a discussion and recommendation regarding the consistency of the proposed development project with the certified PWP/TREP. On or before the hearing deadline, the Commission, by a majority of its membership present, may take one of the following actions on a proposed development project:
   A. Determine the proposed development project is consistent with the certified PWP/TREP, or
   B. Determine the proposed development project is not consistent with the certified PWP/TREP and vote to impose conditions necessary to render the proposed development project consistent with the certified PWP/TREP. The Commission may also impose conditions necessary to render the proposed development project consistent with the certified PWP/TREP at the next scheduled hearing.
4. Following the Commission's action, the Executive Director shall inform SANDAG/Caltrans of the Commission's action and shall forward any conditions associated with the action. If the Commission has voted to impose condition/s necessary to render the project consistent with the PWP/TREP, development shall not be undertaken until the conditions have been incorporated into the project. The Commission review of a proposed development project shall be deemed complete on either:

A. The date of a Commission action determining the proposed development project is consistent with the PWP/TREP (with or without conditions to render it consistent); or

B. If the Commission has failed to take action on the proposed development project by the hearing deadline, the date of the hearing deadline.

5. Upon completion of the Commission's review, SANDAG/Caltrans may undertake the development project provided any conditions imposed by the Commission to render the development consistent with the PWP/TREP have been incorporated into the project.

6.5.6 Development Excluded from Project-Specific PWP NOID Procedures

The categories of development identified in this section are excluded from the requirements of the PWP Development Review Procedures described in Sections 6.5.1 to 6.5.4.

The categories of development covered by this section are as follows:

1. Maintenance dredging of existing navigation channels or moving dredged material from the channels to an area outside the Coastal Zone, pursuant to a permit from the United States Army Corps of Engineers.
2. Repair and maintenance activities specifically described in the document titled "Repair, Maintenance and Utility Hook-up Exclusions from Permit Requirements," adopted by the Commission on September 5, 1978.
3. Repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair and maintenance activities provided the activity does not include:

   A. Any method of repair or maintenance of a seawall, revetment, bluff retaining wall, breakwater, groin, culvert, outfall, or similar shoreline work that involves substantial alteration of the foundation of the structure being repaired or maintained placement of rip-rap or other solid material on a beach or in coastal waters, streams, estuaries, or wetlands, or on a shoreline protective work; replacement of 20 percent or more of the materials of an existing structure with materials of a different kind; or the presence of mechanized construction equipment or construction materials on any sand area, bluff, or ESHA, or within 20 feet of coastal waters or streams.

   B. Any repair or maintenance to facilities, structures, or work located in an ESHA, any sand area, within 50 feet of the edge of a coastal bluff or ESHA, or within 20 feet of coastal waters or streams, that includes: (a) the placement or removal, whether temporary or permanent, of rip-rap, rocks, sand, other beach materials, or any other form of solid materials; and/or (b) the presence, whether temporary or permanent, of mechanized equipment or construction materials.

   C. Any routine maintenance dredging or disposal of dredge materials that involves the dredging of 100,000 cubic yards or more within a 12-month period; the placement of dredged spoils of any quantity within an ESHA, on any sand area, within 50 feet of the edge of a coastal bluff or ESHA, or within 20 feet of coastal waters or streams; or the removal, sale, or disposal of dredged spoils of any quantity that would be suitable for beach nourishment in an area the Commission has declared by resolution to have a critically short sand supply that must be maintained for protection of structures, coastal access or public recreational use.

4. Installation, testing, and placement in service or the replacement of, any necessary utility connection between an existing service facility and any authorized development, including utility

hook-up activities described in the document entitled "Repair, Maintenance and Utility Hook Up Exclusions from Permit Requirements," adopted by the Commission on September 5, 1978.

5. Development authorized by a CDP issued by the Commission prior to certification of this PWP/TREP.

6.6 COASTAL DEVELOPMENT PERMIT REVIEW PROCEDURES

All PWP/TREP improvements located within areas of retained Coastal Commission permit jurisdiction (such as lagoon bridge replacements) and/or proposed to be implemented by another Lead Agency (and therefore subject to separate, local jurisdiction processes) shall be subject to the Coastal Commission CDP review procedures described in this section.

6.6.1 Coastal Development Permit Application Contents

A CDP application for any individual transportation, community or resource enhancement project included in the PWP/TREP shall be clearly indicated as such, and shall include the following information:

1. A description of the proposed development that is: sufficient to understand its size, location, type, and intensity including maps, plans, photographs, etc. Two (2) complete sets of project plans, drawn to scale, must be provided for the site plan(s), floor plans, elevations, grading/ drainage/ erosion control and landscape plans, as applicable. Note: If maps, plans, photographs or other exhibits are larger than 8 ½" x 11" then enough copies must be sent with the application to allow for the distribution to those persons on the Coastal Commission's mailing list and the Coastal Commission staff and commissioners.
2. A consistency analysis of the proposed development with all applicable Chapter 3 policies of the Coastal Act
3. A summary of the proposed developments relationship to the approved PWP/TREP, including project phasing and REP requirements
4. Two (2) copies of any environmental documents and/or technical reports prepared for the project, as applicable.
5. Description of feasible alternatives or mitigation measures, including implementation measures included in the approved PWP/TREP, to substantially lessen any significant adverse impact on the environment.
6. Description and documentation of legal interest in all the property upon which work would be performed.
7. Assessor's parcel map(s) showing the proposed development site and all adjacent properties within 100 feet of the property boundary, excluding adjacent roads.
8. Stamped envelopes (no postage meter) addressed to neighboring property owners and occupants, and other interested parties and a list of the same.
9. Project site vicinity map (copy of Thomas Bros. or other road map or U.S. Geological Survey quad map).
10. Dated signature attesting to the truth, completeness and accuracy of application.
11. Additional information may be requested by the Executive Director to file a complete application, as determined necessary to review the project for consistency with applicable Coastal Act policies (refer to Sample Technical Document/Addressing Coastal Policy Issues section above for

commonly requested resource-specific application information). For additional details, see Title 14, Division 5.5, Chapter 5, Section 13053.5 of the California Code of Regulations.

6.6.2 Coastal Development Permit Noticing Requirements

SANDAG/Caltrans shall provide a list of the addresses of all residences, property owners and occupants located within 100 feet of the perimeter of the real property of record on which the development is proposed, and shall provide a list of names and addresses of all persons known to be interested in the project. Along with the lists, SANDAG/Caltrans shall provide addressed, stamped envelopes with the words "Important. Public Hearing Notice." prominently placed on the front of the envelope. At the time the application is filed with the Coastal Commission, a notice of application for the proposed development permit shall be posted as close as possible to the proposed development site. A standardized posting notice shall be provided by Executive Director when the application is filed.

6.6.3 Application Review Process

1. Within 30 days of receipt of the application and all applicable supporting information for a proposed development project, the Executive Director shall review the submittal and shall determine whether the application is "complete", or whether additional information is necessary to determine if the proposed development project is consistent with the Chapter 3 policies of the Coastal Act, and if additional information is deemed necessary, shall request such information from the project manager.
2. After the application is deemed complete and filed, the Executive Director shall complete a staff report for the permit. The report shall contains the maps, plans, photographs, etc., of the proposed project, a summary of significant questions of fact, a summary of the project's consistency with applicable Coastal Act policies, a copy or summary of public comments, a summary of the legal adequacy of the application and the staff's recommendation for approval, conditional approval or denial of the permit.

6.6.4 Commission Hearing Deadline

The Commission shall hold a hearing on the CDP application no later than 180 days of the application being deemed "complete". If the Commission fails to act upon the CDP on or before the hearing deadline, the noticed development project shall be deemed approved. SANDAG/Caltrans may grant a one-time, 90-day extension to allow more time for the Commission to consider and act on the application during public hearing.

Within the application review time frames, SANDAG/Caltrans have a right to a single postponement request to allow more time for discussion and resolution of any outstanding issues associated with review of the application. The Commission may continue the public hearing on the application at any time, but must act on the application within the 180-day review period, or the extended 90-day review period if granted by the applicant.

6.7 AMENDMENT OF PWP/TREP PROJECT AUTHORIZATIONS

Development in the NCC highway and rail corridors which requires amendment for a project approved prior to PWP/TREP certification, and which is subject to coastal development requirements, shall be pursued through the appropriate authority having jurisdiction over such CDP, unless SANDAG/Caltrans and the Executive Director of the Commission determine review of the amended project under PWP procedures is more appropriate.

Authorization for development that has been deemed consistent with the PWP/TREP by SANDAG/Caltrans and the Commission may be subsequently amended as necessary according to the following procedures and as set forth in California Code of Regulations, Title 14 Section 13365 Amendment of Public Works Plan. The PWP amendment process is illustrated in Figure 6-5.

Design modifications and/or changed site conditions (new or changed resources) which deviate from the scope and/or conditions documented in the approved PWP/TREP, but that do not result in significant new impacts to coastal resource, and/or result in impacts which are addressed with adopted PWP/TREP policies and implementation measures, will not require an amendment to the approved TRE/PWP and may be reviewed and implemented by the Commission according to the NOID procedures included in this Chapter.

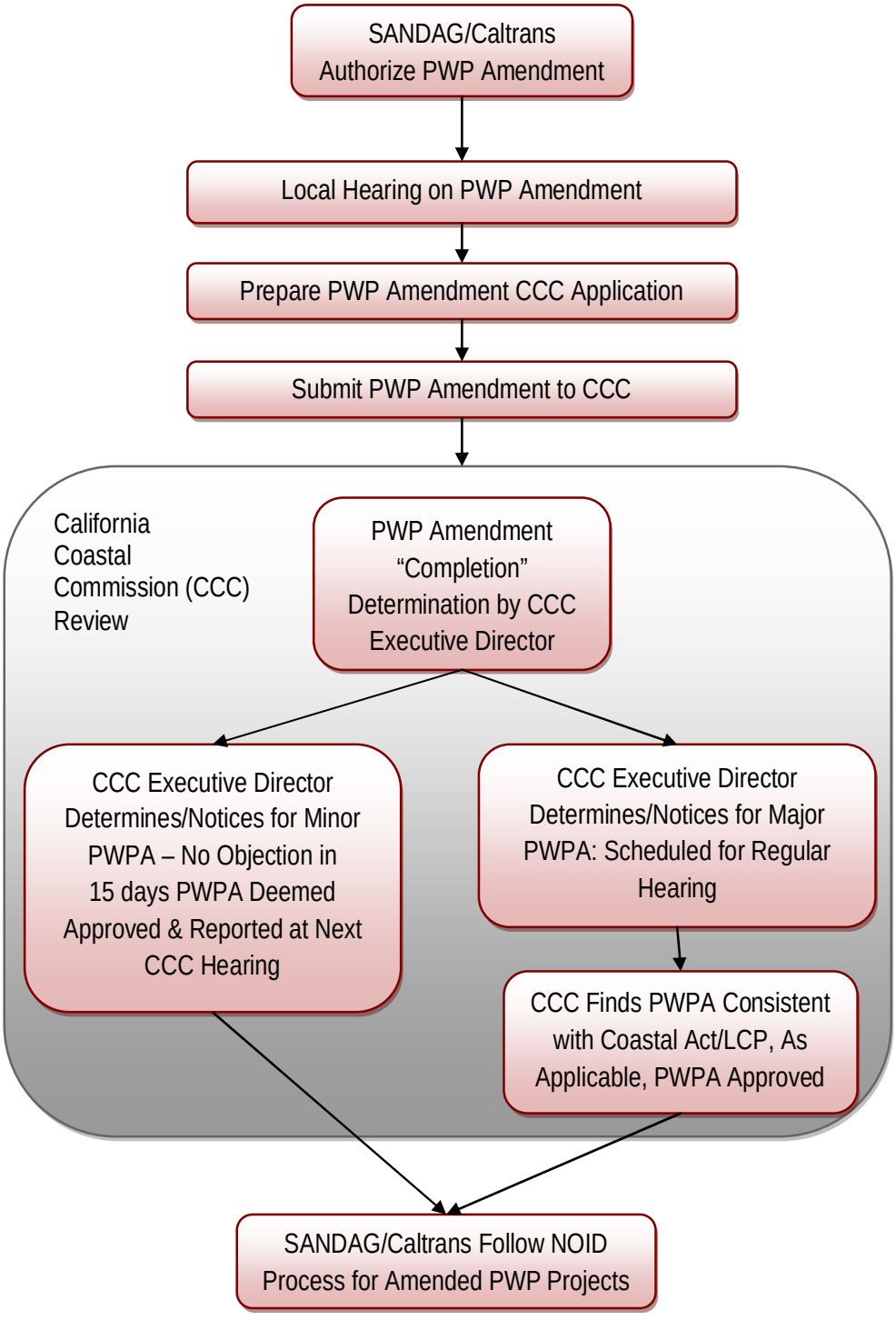
6.7.1 Public Hearing at Local Level

Prior to the submission of an application for an amendment to the PWP, SANDAG/Caltrans shall demonstrate a public hearing at the local level has been held on the proposed amendment within a reasonable time prior to submission of the amendment application to the Commission. In determining the reasonableness of the time of the public hearing(s), the Executive Director shall consider the location, scope or size of the PWP project or activity subject to amendment, the progress of SANDAG/Caltrans toward obtaining all funding and governmental approvals for the amendment project or activity, and development of the PWP amendment. A steady progression of SANDAG/Caltrans toward development of the PWP amendment in this manner, after holding public hearings on the amendment, shall constitute evidence of the reasonableness of the time of the prior public hearing.

6.7.2 Amendment Application Contents and Commission Review of Application

1. An application for an amendment to the PWP shall be submitted to the Executive Director of the Commission and shall contain sufficient information regarding the type, size, intensity and location of amended development activity intended to be undertaken pursuant to the PWP and/or any changes to PWP policies, standards or procedures to determine consistency with applicable policies of Chapter 3 of the Coastal Act and/or the certified LCP, including, but not limited to the following, where applicable:
   A. The specific type of activity or activities proposed to be undertaken
   B. The maximum and minimum intensity of activity or activities proposed to be undertaken (e.g., maximum traffic capacity of a road)
   C. The maximum size of facilities proposed to be constructed pursuant to the plan (e.g., number of lanes of a road) and the proposed timetable for precise definition of all projects included in the plan and any phasing of development activity contemplated
   D. The service area for the proposed activity or activities
   E. The proposed method of financing the activity or activities including any direct or indirect means of obtaining or guaranteeing funds through the assessment or any other form of levy against lands located within the Coastal Zone and an estimate of the projected amount of revenues to be obtained from land or water areas located in the Coastal Zone over the useful life of the proposed development
   F. Environmental analysis, reports, studies, maps, etc. prepared for the PWP amendment and relevant to the analysis of the PWP amendment's consistency with Chapter 3 policies of the Coastal Act and/or the certified LCP, as applicable.

FIGURE 6-5: PUBLIC WORKS PLAN AMENDMENT PROCESS



G. The proposed location or alternative locations considered for any development activity or activities to be undertaken pursuant to the proposed plans.

H. The Executive Director of the Commission may require the submission of any additional information deemed necessary to determine consistency of the proposed amendment with Chapter 3 policies of the Coastal Act and/or the certified LCP, as applicable.

2. The Executive Director of the Commission shall deem a PWP amendment application complete at such time as the Executive Director determines the information required pursuant to this section has been received at the appropriate Commission office. Said review shall be completed within no later than five (5) working days after the date it is received in the district office of the Commission during normal business hours, unless there are unusual circumstances, in which case said review shall be completed within no later than thirty (30) calendar days after the date it is received. Immediately upon making such determination, the Executive Director shall affix the date of filing to the application file and notify SANDAG/Caltrans of the application completeness determination.

3. In the event of disagreement concerning the need for additional information or the adequacy of information submitted to enable the Commission to analyze the PWP amendment for consistency with Chapter 3 of the Coastal Act or certified LCP, as applicable, SANDAG/Caltrans may appeal the Executive Director's determination that additional information is needed to the Commission for resolution. The Executive Director shall schedule the matter for hearing and resolution at the next Commission meeting or as soon thereafter as practicable, but no later than 60 calendar days after the Executive Director's receipt of written appeal by SANDAG/Caltrans expressing disagreement with the Executive Director's determination that additional information is needed to analyze the PWP amendment for consistency with Chapter 3 of the Coastal Act or certified LCP, as applicable. The appeal shall be scheduled and heard by the Commission in accordance with the procedures set forth California Code of Regulations, Title 14 Section 13056(d). The Executive Director shall notify SANDAG/Caltrans, no later than 60 calendar days after the Executive Director's receipt of written appeal by SANDAG/Caltrans, of any change in the Executive Director's determination that additional information is necessary to analyze project consistency with the certified PWP/TREP as directed by the Commission.

4. The Executive Director shall provide, make available to the public, or demonstrate the PWP amendment submittal materials have been available for public review, including environmental information on the amendment necessary to enable the Commission to determine the consistency of the amendment with the Chapter 3 policies of the Coastal Act and/or the certified LCP, as applicable. Where the Executive Director determines it is not feasible to distribute the PWP amendment submittal materials and/or relevant environmental information due to the size or volume of the documents, or because of the costs of such distribution, the Executive Director shall provide notice to interested persons of the location of the environmental documents which are available for review, and a list of those documents. The PWP amendment materials and relevant environmental information shall be distributed or made available to the public prior to public hearing on the plan, and the Commission shall provide the opportunity for public comment in response to the information prior to the close of the public hearing on the plan.

6.7.3 Commission Rejection of Application for PWP Amendment

An application for an amendment to the PWP may be rejected if, in the opinion of the Executive Director of the Commission, the proposed PWP amendment would lessen or avoid the intended effect, or any conditions, of the certified PWP. The determination by the Executive Director to reject an amendment application shall be transmitted, in writing, to the applicant with an explanation of the reasons for such rejection.

6.7.4 Commission Acceptance/Process of Application for Minor Amendment

Design modifications and/or changed site conditions which may substantially deviate from the scope and/or conditions documented in the approved PWP/TREP, but that do not result in significant new impacts, and/or result in impacts that are addressed with adopted PWP/TREP policies and implementation measures may be subject to a minor PWP amendment.

Where an application for an amendment to a PWP is accepted, the Executive Director shall determine whether the proposed amendment is minor in nature. If the Executive Director determines the proposed amendment is minor in nature, notice of such determination shall be mailed to the Commission and to all parties the Executive Director knows or has reason to know may be interested in the amendment. If no written objection to the proposed amendment is received in the Commission office within fifteen (15) working days of the published notice, the proposed PWP amendment shall be deemed minor in nature, and shall be approved. The Executive Director shall notify the Commission of the approved minor PWP amendment at the next regular meeting of the Commission.

6.7.5 Commission Acceptance/Process of Application for Major Amendment

Design modifications and/or changed site conditions which substantially deviate from the scope and/or conditions documented in the approved PWP/TREP, and that have the potential to result in significant new impacts not addressed with adopted PWP/TREP policies and implementation measures may be subject to a major PWP amendment.

If the Executive Director determines the proposed PWP amendment is not minor, or if reasonable objection is made to the Executive Director's determination that the proposed PWP amendment is minor, or if the proposed amendment affects elements of the certified PWP adopted for purposes of protecting a coastal resource or coastal access, the amendment application will be processed as a regular amendment subject to the following procedures.

6.7.6 Notice and Hearing Procedures for Major Amendment

1. The Executive Director shall provide notice, and prepare and make available a staff report for the Commission, SANDAG/Caltrans, any affected local government, any persons who participated in the Commission hearings for review of the public works plan, and any other persons known or thought to be interested in the proposed public works plan amendment of the acceptance of the amendment application.
2. The Commission shall hold a hearing on the proposed PWP amendment no later than sixty (60) calendar days following the day the PWP amendment application is deemed “complete”. If the Commission fails to act upon the PWP amendment on or before the hearing deadline, the PWP amendment shall be deemed certified. The hearing deadline may be extended if, on or before the hearing deadline, the Commission extends for good cause the hearing deadline for a period not to exceed one year from the original hearing deadline as established by the date the PWP amendment application was deemed complete.

6.7.6.1 Public Works Plan Amendment in Areas without a Certified LCP

1. Where PWP amendment review occurs prior to certification of a LCP, SANDAG/Caltrans may submit the PWP amendment to the Commission for review and certification. Approval of a PWP amendment by the Commission shall be accompanied by specific written findings that:
2. The development is in conformity with Chapter 3 of the California Coastal

3. That there are no feasible alternatives or feasible mitigation measures, as provided in CEQA, available that would substantially lessen any significant adverse impact that the proposed amendment may have on the environment.

6.7.6.2 Public Works Plan Amendment in Areas with a Certified LCP

1. Where PWP amendment review follows certification of a LCP and if a proposed PWP amendment does not require an amendment to the LCP pursuant to Public Resources Code Section 30515, SANDAG/Caltrans may submit the PWP amendment to the Commission for review and certification. Commission review shall be undertaken only after consultation with the affected local government who may recommend modifications necessary for the proposed PWP amendment to adequately carry out the certified LCP.
   A. At least 10 working days prior to the first public hearing on a proposed PWP amendment directly affecting a portion of the Coastal Zone for which a LCP has been certified by the Commission, the Executive Director of the Commission shall direct the Commission staff to consult with the affected local government with respect to the impact of the proposed PWP amendment on the Coastal Zone and on the certified LCP; the results of such consultation shall be reported to the Commission at the first public hearing on the proposed PWP amendment.
   B. At least 5 working days prior to transmitting a written recommendation on the proposed PWP amendment to the Commission, the Executive Director shall request the affected local government(s) transmit to the Commission its determination as to whether the proposed PWP amendment is in conformity with the certified LCP in the jurisdiction(s) affected by the proposed PWP amendment.
   C. The affected local government may, within its discretion, transmit its determination as to the conformity of the proposed PWP amendment with the LCP, in writing to the Commission prior to the Commission's vote on the proposed PWP amendment, and may include any recommended modifications of the proposed PWP amendment that would conform it to the LCP; a local government may also indicate any proposed amendments to its LCP that would be necessary to accommodate the proposed PWP amendment.
   D. Approval of a PWP amendment by the Commission shall be accompanied by specific factual findings supporting the conclusion that the PWP amendment, as approved, is in conformity with the certified LCP in jurisdictions affected by the proposed public works plan amendment.

6.7.7 Consolidated Review of PWP Amendment and Project-Specific NOID

If a proposed project intended to be undertaken pursuant to a PWP amendment is submitted to the Commission for a NOID concurrent with the submittal of a PWP amendment, the Commission shall review the project and the PWP amendment concurrently, and shall, if the project NOID is consistent with applicable Chapter 3 policies of the Coastal Act, approve the project as an integral component of the PWP amendment. The Commission may require conditions, where necessary, to bring the project into conformance with the Coastal Act.

6.8 EMERGENCY AUTHORIZATIONS

Definition of Emergency. For the purpose of this section, the term “emergency” means: A sudden unexpected occurrence demanding immediate action to prevent or mitigate loss or damage to life, health, property or essential public services.

6.8.1 Emergency Development in Areas Outside of the Commission's Retained Jurisdiction

1. **SANDAG/Caltrans Director Authority:** Where immediate action by SANDAG/Caltrans is required to protect life and property within the PWP/TREP area from imminent danger, or to restore, repair, or maintain rail or freeway right-of-way, utilities, or services destroyed, damaged, or interrupted by natural disaster, serious accident, or in other cases of an emergency, the SANDAG/Caltrans director may authorize emergency development on PWP/TREP area outside of the Commission's permit jurisdiction area in compliance with this section. Emergency work within areas subject to the Commission's permit jurisdiction is addressed in Section 6.7.1.
2. **Extreme Emergency Requiring Immediate Action:** If an emergency is so extreme it does not allow time for the written requests, authorizations, and coordination described in this section, SANDAG/Caltrans personnel or other authorized persons undertaking any emergency development shall adhere as closely as reasonably possible to the written request, authorization, and coordination portions of these procedures.
3. **Authorization of Emergency Development:** SANDAG/Caltrans may undertake emergency development in the PWP/TREP area if it is found that:
   A. Immediate action by the SANDAG/Caltrans is required to protect life and property from imminent danger, or to restore, repair, or maintain university property, utilities, or services destroyed, damaged, or interrupted by natural disaster, serious accident, or in other cases of emergency;
   B. The emergency requires action more quickly than could occur through the PWP/TREP normal development review procedures, and the emergency development can and will be completed within 30 days unless otherwise specified in the emergency authorization;
   C. Public comment on the emergency development has been reviewed, if time allows;
   D. SANDAG/Caltrans has coordinated with planning staff in the South Coast District office of Commission and/or the Executive Director pursuant to as much as feasible;
   E. The emergency development proposed is the minimum necessary to address the emergency and, is the least environmentally damaging temporary alternative for addressing the emergency; and
   F. The emergency development proposed would be consistent with the PWP/TREP as much as feasible and/or would not impede attainment of PWP/TREP requirements following completion of the emergency development.
4. **Notice of Emergency Development Authorization:** No later than 3 days of the occurrence of the disaster or the discovery of the danger, SANDAG/Caltrans shall provide the Executive Director of the Commission with at least telephone notice of the type and location of the emergency action taken. As soon as possible and no later than 7 days after the emergency, SANDAG/Caltrans shall submit, for information purposes only, a written Notice of Emergency Development Authorization to the Executive Director.
5. **Development authorized Pursuant to the Notice of Emergency Development Authorization:** Emergency development authorized pursuant to this Section is subject to the following conditions:
   A. Emergency development must be completed within 30 days and the development is considered temporary unless it is subsequently authorized through regular PWP/TREP or CDP review procedures, which review must commence within ninety (90) days of the emergency authorization. Issuance of an emergency authorization shall not constitute an entitlement to the erection of permanent development or structures

B. Development authorized through the emergency process must be removed and the affected area restored if a development project authorization has not been received within one year of authorization of the emergency development. If not so authorized, the emergency development, or unauthorized portion thereof, shall be removed and the affected area restored.

6.8.2 Emergency Development in Areas within the Commission's Permit Jurisdiction

1. In the event of an emergency necessitating emergency development on land on which the Commission retains permit jurisdiction the procedures of this subsection shall apply.
   A. SANDAG/Caltrans shall apply for an emergency permit to the Executive Director, by letter if time allows, or by telephone or in person if time does not allow. All processing of the proposed emergency permit shall be in accordance with California Code of Regulations, Title 14 Sections 13136-13143.
   B. Where immediate action by SANDAG/Caltrans is required to protect life and public property from imminent danger or to restore, repair, or maintain public works, utilities, or services damaged or interrupted by natural disaster or other emergency, the requirement for obtaining an emergency permit may be waived, in accordance with Section 30611 of the Coastal Act; provided that SANDAG/Caltrans shall comply with the requirements of Section 30611. SANDAG/Caltrans shall notify the Executive Director of the type and location of the emergency work within 3 days of the disaster or discovery of the danger, whichever comes first. This subsection does not authorize erection of any permanent structure valued at more than $25,000. Within 7 days of taking action, SANDAG/Caltrans shall notify the Executive Director in writing of the reasons why the action was taken and provide verification of compliance with the expenditure limits. SANDAG/Caltrans submittal to the Executive Director shall be reported to the Commission and otherwise processed in accordance with California Code of Regulations, Title 14 Section 13144.

6.9 MONITORING OF PWP/TREP DEVELOPMENT PROJECTS

The PWP/TREP development review procedures for project NOIDs and reporting requirements for the phasing plan and REP contained in this Chapter will provide the vehicle to continuously track and evaluate PWP/TREP program and project implementation to ensure program benefits, including benefits to coastal access and coastal resources, are balanced with or exceed program impacts through the full 30 year planning period. To further monitor PWP/TREP program and project implementation, the PWP/TREP includes a monitoring and reporting program which will provide yearly assessment and summary of information and updates to the Implementation Framework to document projects and associated mitigation requirements completed, and to assess cumulative phase impacts, benefits and available resource mitigation credits for future project and/or phase implementation. Should a circumstance arise where a yearly report determines unanticipated resource impacts have occurred or are greater than anticipated for any particular project phase identified in the PWP/TREP, SANDAG/Caltrans will be responsible for initiating additional projects pursuant to the appropriate procedures outlined in this Chapter to sufficiently balance program impacts and benefits, prior to initiating any development contained in a subsequent phase.

6.9.1 PWP/TREP Monitoring and Reporting Program

The project manager and/or other SANDAG/Caltrans personnel assigned responsibility to implement and/or monitor authorized development projects shall prepare an annual PWP/TREP monitoring report,

commencing with approval of the PWP/TREP by the Commission, which includes a cumulative and calendar year summary of:

1. Status of PWP/TREP-authorized development project implementation for the year (status of any associated authorizations, funding, construction timeline, etc.) and summary of compliance with any applicable implementation measures and/or conditions placed on the authorized NOID
2. Status and summary of compliance with conditions for any continuing obligations from project authorizations in previous years.
3. Any emergency authorizations that occurred and summary of compliance with Section 6.8
4. Any comments received on PWP/TREP implementation (project construction, condition compliance, etc.)
5. Preparation and/or submittal status of PWP/TREP phasing and/or REP monitoring reports required pursuant to Sections 6.2.1 and 6.2.2 of this Chapter.

The project manager or other responsible SANDAG/Caltrans personnel shall verify authorized project compliance with all applicable implementation measures and that all NOID conditions have been timely fulfilled. The project manager or other responsible SANDAG/Caltrans personnel shall update and maintain a current copy of the PWP/TREP Preliminary Phasing Plan, prepared and implemented pursuant to Section 6.2.1, as may be revised per the procedures contained in this chapter, and any other applicable documents and project plans demonstrating compliance with the PWP/TREP. SANDAG/Caltrans shall maintain a record of these annual monitoring reports and they shall be available for public review.

6.10 PWP/TREP FUNDING PLANS

6.10.1 Sources of Funding

With a diverse program of transportation, community and resource enhancement projects in the corridor, funding will come from a variety of sources including local, state, and federal governments. SANDAG and Caltrans will have primary responsibility for developing funding in order to ensure program implementation. While funding is certain to change over time, some of these funding grants and programs that may enable the implementation of this program are listed below.

6.10.1.1 Local

- *TransNet* One-Half Percent Local Sales Tax Revenues
- Environmental Mitigation Program (EMP)
- Transportation Development Act (TDA)
- Local Street and Road Gas Tax Subventions
- Local Street and Road General Fund and Other Revenues
- Toll Road Funding – debt financing backed by future HOT/Express Lane revenues

6.10.1.2 State

- State Transportation Improvement Program (STIP)
- State Transit Assistance (STA) Funds
- Proposition 1B Infrastructure Bonds

- Traffic Congestion Relief Program (TCRP) Funds
- State Highway Operations, and Preservation Program (SHOPP) and Maintenance and Operations Program Funds
- Future State/Federal Gas Tax or Equivalent Revenue Increases

6.10.1.3 Federal

- FTA Discretionary (Section 5309) Funds
- FTA Formula (Section 5307 and 5309) Funds
- Surface Transportation Program (STP) Funds
- Congestion Mitigation and Air Quality (CMAQ) Funds
- Miscellaneous Federal/State/Private/Other Capital Revenues
- American Recovery and Reinvestment Act – Federal Stimulus Bill